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## Improving Public Participation in Greenland Extractive Industries

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*Published in:*  
Current Developments in Arctic Law

*Publication date:*  
2017

*Document Version*  
Publisher's PDF, also known as Version of record

[Link to publication from Aalborg University](#)

*Citation for published version (APA):*  
Hansen, A. M., & Johnstone, R. L. (2017). Improving Public Participation in Greenland Extractive Industries. In K. Hossain, & A. Petrétei (Eds.), *Current Developments in Arctic Law* (Vol. 5, pp. 29-33). University of Lapland. Current Developments in Arctic Law Vol. 5

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# CURRENT DEVELOPMENTS IN ARCTIC LAW

Volume 5

2017

UNIVERSITY OF LAPLAND  
Rovaniemi



**UArctic**  
Thematic Networks

# Current Developments in Arctic Law

Editors: Kamrul Hossain and Anna Petrétei

Publisher: University of Lapland

Current Developments in Arctic Law is produced in cooperation within UArctic Thematic Network on Arctic Law

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Cover: Zofia Hyjek

ISSN: 2343-3418

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# Editors' Note

## Arctic Law: Updates on Current Developments

*Kamrul Hossain & Anna Petrétei*

The development of international law as it applies to the Arctic has gained some momentum in the recent past. Current developments include the conclusion of an Agreement at the end of 2017 that would ban unregulated fishing in the Central Arctic Ocean for at least the next sixteen years. One of the objectives of the Agreement is to allow scientists to do more investigation and learn more about the largely unknown marine ecology of the Arctic high seas. The Agreement was concluded by nine nations, including five Arctic coastal states and four East Asian states, as well as the European Union (EU). Connected to this regional Agreement, it is important to note that a new global treaty, or the so-called Agreement on “Biodiversity Beyond National Jurisdictions” (BBNJ) is currently under negotiations at the United Nations level, and within the framework of the Law of the Sea (LOS) Convention. The objective of the potential treaty is to promote the conservation and sustainable use of marine biological diversity in areas beyond national jurisdiction. The potential Agreement does have particular significance for the Arctic Ocean, given that 20% of its marine areas fall outside of national jurisdictions. The potential Agreement has not placed the

Arctic Ocean as a focused area. Nonetheless, the potential BBNJ Agreement highlights specific concerns of maritime regimes that have distinct characteristics, such as the Arctic. However, it is yet to be seen how the negotiation processes will move forward, and to what extent the implications for the Arctic’s marine BBNJ can be addressed within its framework.

Important legal developments have also been accomplished under the auspices of the Arctic Council. The most recent development includes the Agreement on the Enhancing International Arctic Scientific Cooperation, signed at the Fairbanks Ministerial meeting on 11 May 2017. Prior to this Agreement, the Arctic Council facilitated the conclusion of two other treaties – the Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic in 2013, and the Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic in 2011. The *Polar Code*, negotiated within the auspices of International Maritime Organization (IMO) entered into force at the beginning of 2017, and improves maritime safety and security, not only for navigation through the Arctic sea routes, but also for the Arctic’s marine environment. Concerning the settlement of disputes on the outer limits of continental shelves in the Arctic Ocean, which previously resulted in tensions amongst the coastal states, the issue appears to have been peacefully addressed, and in compliance with the norms embodied in the LOS

Convention. Concerning human dimensions, local and indigenous peoples of the Arctic have continuously been striving to raise awareness on issues that affect them, and advocate for their rights in line with the framework of human rights law, and other policy frameworks. Today, representatives of Arctic indigenous peoples participate in negotiations in international law making, for example, in international negotiations concerning climate change laws. These significant legal developments have been progressively advanced in the Arctic.

While legal progress continues to develop, there are other remarkable advancements in the Arctic in terms of the expansion of human activities. Resource extraction, both onshore and offshore, are intensifying. Shipping routes along the Arctic coasts are increasingly open for longer periods of time, attracting larger volumes of cargo and increasing traffic. This progress offers both opportunities and challenges. New players, in particular the East Asian countries such as China, Japan, and South Korea, are increasingly engaging in Arctic affairs. These countries are becoming dependent on various forms of energy supplies from Arctic states, in particular Oil and gas from Norway and Russia. Most of these supplies are expected to be transported through the Northern Sea Route (NSR). China, for example, estimates that from 2020 onward, it will carry out approximately 15 % of its maritime trade through the NSR. On the 26<sup>th</sup> of January 2018, China released its White Paper on Arctic

Policy, highlighting its interests in the Arctic, with a special focus on expanding its trade and infrastructure networks through the creation of the Polar Silk Road along the NSR, as part of its Belt and Road Initiative (BRI).

Increased human activities bring economic incentives, but also produce new sources of pollution, which contributes to the acceleration of climate change, threatening the stable functioning of Arctic's eco-system services. The preservation of the Arctic's natural environment and biodiversity are important for all inhabitants, and in particular for indigenous peoples, whose relationship with nature and natural environment are vital to their sustenance. Therefore, macro level developments such as resource extraction, trade and investments, marine transportation, and the increasing engagement of actors from both inside and outside of the Arctic, have clear implications on the local communities at the micro level. It is within this context that the United Nations Sustainable Development Goals (SDGs) are applicable to the Arctic (not only to the global south), to the extent that they fundamentally concern local and indigenous peoples. The Finnish Chairmanship of the Arctic Council has highlighted its willingness to endorse the SDGs in various projects led by Finland and/or other Arctic countries within its chair period. Consequently, legal developments also coincide with policy developments, and this combination can contribute to sustainable development in the Arctic



that favors the people and communities inhabiting the region.

This is the 5<sup>th</sup> Volume of the Current Developments in Arctic Law, and reflects a new and reformatted look. The Volume is an electronic book approximately one hundred and twenty pages long, and consisting of seventeen contributions on various topics. These papers represent both academic and non-academic contributions. While these contributions are not peer-reviewed, and opinions expressed therein are of those of the individual authors of each chapter, we firmly believe that the contributions offer interesting insights and updates on current developments in the Arctic, as well as ongoing projects that scholars with Arctic interests have been engaged with.

The Volume is produced by the leadership of the UArctic Thematic Network on Arctic Law – an association of scholars with a background in law and social sciences. We are thankful to the UArctic Thematic Network (TN) office and the members of the TN on Arctic Law for their continuous support. We are especially thankful to the contributing authors for their insights and updates on many interesting themes. Finally, we are grateful to Joëlle Klein and Marcin Dymet for their kind help with editing and proofreading. We hope that readers with an interest in the Arctic will find the Volume useful.



Rovaniemi  
20 March 2018



## Conference report: The role of non-Arctic states/actors in the Arctic legal order-making

*Tony Cabus & Maiko Raita\**

On 7–9 December 2017, the Polar Cooperation Research Centre (PCRC), Kobe University, Japan, hosted a symposium on The Role of Non-Arctic States/Actors in the Arctic Legal Order-Making. The conference was the third international symposium organized and hosted by PCRC since its establishment in October 2015.

Twenty eight experts, including Koji Sekimizu, former Secretary-General of the International Maritime Organization (IMO); Keiji Ide, Japan's Ambassador for Arctic Affairs; Rasmus G. Bertelsen, professor of Northern Studies, UiT– The Arctic University of Norway; Erik Molenaar, Deputy Director of the Netherlands Institute for the Law of the Sea (NILOS) at Utrecht University; or Dalee Dorrough, University of Alaska Anchorage discussed crucial policy issues related to the Arctic region. The panel of scholars and practitioners

touched upon various questions ranging from shipping governance and fisheries to the role of indigenous peoples and non-Arctic states. Chaired by Professor Akiho Shibata from Kobe University, the conference was a good opportunity to deepen our understanding of the Arctic and broaden our perspective.<sup>1</sup>

The symposium took the explicit perspective of outside states (especially from Asian states) and indigenous communities. On the first day, two sessions on Global Arctic Shipping Governance and Central Arctic Ocean Fisheries saw contributions from Koji Sekimizu, Rasmus Bertelsen, Erik Molenaar, Joji Morishita, Leilei Zou, Geir Hønneland, Alexander Serguning, Kentaro Nishimoto, Piotr Graczyk, Chin Eng Ang and Elena Kienko. They addressed the implementation of the Polar Code and the Five-plus-Five process on fisheries in the Central Arctic Ocean. The second day focused on indigenous peoples' rights with Dalee Dorrough, Aytalina Ivanova, Florian Stammer and Nikolas Sellheim discussing indigenous communities' issues in the light of non-Arctic influence on their customary laws. A second session focused on Policy-Relevant Science within the Context of the Arctic with contributions from Akiho Shibata, Malgorzata Smieszek, Hajime Kimura

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<sup>1</sup> For all information on the conference, please visit <http://www.cscenter.co.jp/pcrc/>.

and Harada Naomi. Finally, on the third and last day, in two sessions Keiji Ide, Timo Koivurova, Sebastian Knecht and Aki Tonami presented the role of observers in the Arctic Council as well as perspectives, roles and strategies of Asian states in the Arctic legal-order making. Discussants in these sessions were Piotr Graczyk, Yuanyuan Ren and Marzia Scopelliti as well as Jian Yang and Wonsang Seo.

Discussions showed that with the admittance of five Asian states, namely China, India, Japan, South Korea and Singapore as observers to the Arctic Council (AC) we can witness a change in the governance of the Arctic. This extension is inherently linked to the transformations of the Arctic itself but also to the changes in the rest of the world as new actors and especially Asian states emerge. At the same time, the legal order of the Arctic must respect the sovereignty of the Arctic states – Russia, Finland, Sweden, Norway, Iceland, Denmark/Greenland, Canada and the United States – as well as the tradition and cultural livelihood of the indigenous peoples and the local communities. This balance between Arctic actors and non-Arctic actors therefore becomes the core problematique for the legal order of the Arctic.

It was identified that for non-Arctic states, one of the major issues is shipping governance. This topic usually concerns the possibility of new transit shipping routes along the Northern Sea Route (NSR), the Northwest Passage or the Transpolar Route and is of highly geopolitical nature. Indeed, as the ice melts, a shorter shipping road between (especially) Asia and Europe opens. This creates new economic opportunities for Arctic states and non-Arctic states alike, especially in terms of container shipping and energy resources (e.g. the Yamal LNG project).<sup>2</sup> For Asian states like China, Japan and South Korea, it also touches key energy security questions since the Arctic road can be much safer than the Middle East road and thus be worth the investment. For China it is also a route which is not exclusively controlled by the US Navy. In the end, whether or not it involves resources, Asian Arctic policies are mainly translated in geoeconomic measures such as Economic Partnership Agreements (EPA) or investment plans (the Yamal project). For China for instance, the secure supply of natural resources via the NSR could be part of its broader One Belt, One Road initiative which focuses on the development of modern infrastructures along routes connecting Asia and Europe with the objective of boosting exchanges between the two continents.

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<sup>2</sup> President Vladimir Putin recently inaugurated the largest extractive installation for LNG in Yamal, Russia after a \$27 bn investment funded by Chinese banks and Total.

However, to exploit these new opportunities, numerous factors are to be considered in the fields of politics, international law (public and private), environment, technology and finance. This colossal amount of required knowledge could make good use of international cooperation – not only on the state level but on the sub-state level as well. Bearing this in mind, research departments, universities and institutes, forming epistemic communities<sup>3</sup> will be relevant to identify the issues involved in Arctic activities and present a comprehensive view through trans-disciplinary studies. As a matter of fact, resilient epistemic communities would help in two ways: first, they would motivate cooperation in a field which is strongly dependent on unilateral measures; second, they would provide policy-relevant science for policy maker<sup>4</sup> in order to match more accurately their political and economic objectives.

On a broader scope, the conference combined two essential strings: cooperation between Arctic and non-Arctic states; and between states and non-state actors in the Arctic. Taking a comprehensive approach, it aimed to clarify each role of non-Arctic states and

non-state actors in the Arctic region for the future legal order-making. In addition, its discussions also showed the degree of collaboration between non-Arctic states and non-state actors with Arctic states.

One representative example was found in the discussions surrounding policy-relevant science. The respective session (Day 2) focused on how to make Arctic marine scientific observation ‘relevant’ to the international policy community based on a case study of the Arctic Challenge for Sustainability (ArCS) project in Japan. The questions that were raised focused on a gap between policies and substantial activities in the Japanese case. It showed that, on the one hand, the Japanese government released its Arctic policy which aimed to contribute to the sustainable development for the Arctic’s indigenous peoples. On the other hand, its scientific activities were substantially left up in the air. Cooperation between Japan and indigenous peoples in the Arctic still stands at an early stage, limited to the economic, cultural and educational level as was discussed in the preceding session on the legal status of the Arctic’s indigenous peoples.

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<sup>3</sup> “An epistemic community is a network of professionals with recognized expertise and competence in a particular domain and an authoritative claim to policy-relevant knowledge within that domain or issue-area.” Haas, P.M. "Introduction: epistemic communities and international policy coordination". International Organization, special issue: Knowledge, Power, and International Policy Coordination. 46 (1): 1–35.

<sup>4</sup> On this particular topic, Japan has set up the Arctic Challenge for Sustainability (ArCS) project comprising specialists on diverse fields in natural and social sciences.

Another example was found in the discussion on shipping governance. One of its main purpose was to explore intersection between the Arctic Council (AC) and the IMO. While the main Arctic governance forum was the AC whose members are also IMO member states, the IMO and interested non-Arctic shipping nations had limited access to negotiations of shipping governance in the Arctic region. For this scope, some noteworthy comments emerged. For instance, indigenous peoples faced difficulties to convey their voice into the IMO, and the intersection between the AC and IMO would be a good opportunity for them. In this sense, it is notable that the conference not only specified their current individual situation, but also indicated the potential of discussion between non-Arctic states and indigenous peoples with Arctic states via other international fora as a next step for future Arctic governance.

The research approach to the Arctic taken by the PCRC is based on the perspective that challenges faced in the Arctic cannot be addressed only within the Arctic, but should take a geographically and functionally inclusive approach. Funded by the ArCS, PCRC will continue its work until 2020. The official website of PCRC can be found at: <http://www.research.kobe-u.ac.jp/gsics-pcrc/index.html>.



# Legal Developments Surrounding Anthropogenic Noise in the Arctic Ocean

Miriam Czarski\*

## Introduction

Inaccessible for centuries, the Arctic has been left to itself. With global warming, however, this situation is beginning to change as shipping and extractive industries, along with sonar and seismic testing, are slowly becoming a reality in the Arctic Ocean. Concerns surrounding the impacts of such activities are usually focused on environmental degradation, yet the adverse effects of anthropogenic noise on marine biodiversity should not be overlooked.

The impacts of noise on marine biodiversity were initially raised a few decades ago by scientists who documented mass strandings of whales and significant decreases in fish catches near seismic survey sites.<sup>1</sup> Thanks to

these discoveries, various intergovernmental organizations (IOs) started investigating the effects of noise on wildlife and taking action through the development of resolutions and guidelines to address these impacts. The International Whaling Commission (IWC) was the first IO to address underwater noise. In 1998, the IWC included noise pollution among its eight priority research topics<sup>2</sup> and, subsequently, prepared several reports on the noise impacts of seismic and sonar surveys on cetaceans which continue to constitute valuable sources of information on noise pollution.<sup>3</sup>

Most scientific data collected on noise and marine biodiversity in the Arctic Ocean has been focused on whales, in particular, belugas, narwhals and bowhead whales. Noise causes stress in whales, and the cumulative impacts of noise and other stressors in the whale's environment can lead to reduced reproductive output.<sup>4</sup> Noise forces whales to compete with anthropogenic noise that is too similar to their own pitch calls, such as shipping and extractive activities, and this can make it challenging for whales to find mates and

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<sup>1</sup> Irini Papanicolopulu, 'On the interaction between law and science: considerations on the ongoing process of regulating underwater acoustic pollution' (2011) 1 *Aegean Rev Law Sea* 247, 249.

<sup>2</sup> Irini Papanicolopulu, 'The European Union and the Regulation of Underwater Noise Pollution', in Davor Vidas and Peter Johan Schei (eds), *The World Ocean in Globalization: Climate Change, Sustainable Fisheries, Biodiversity, Shipping, Regional Issues* (Martinus Nijhoff, 2011) 457, 460.

<sup>3</sup> *Ibid* 460.

<sup>4</sup> Andrew J Wright and Line A Kyhn, 'Practical management of cumulative anthropogenic impacts with working marine examples' (2014) 29(2) *Conservation Biology* 333, 335.

feeding grounds. Noise also makes it difficult for whales to know when predators are approaching and, where whales struggle to navigate because of noisy waters, can cause strandings and, sometimes, whale death.

Research on the impacts of noise on other forms of life in the Arctic Ocean is lacking to a large extent. However, data does show that marine ecosystems are highly interconnected, more so than on land, meaning that there is a greater risk of broad ecological impacts from noise to Arctic marine ecosystems.<sup>5</sup>

### **General legal regimes for noise**

The United Nations Convention on the Law of the Sea (UNCLOS) is recognized as establishing the main legal regime applicable to oceans and continental shelves across the globe. UNCLOS defines pollution of the marine environment at paragraph 1(4) as the “...introduction by man, directly or indirectly, of substances or *energy* into the marine environment, including estuaries, which results or is likely to result in such deleterious effects as harm to living resources and marine life, hazards to human health, hindrance to marine activities, including fishing and

other legitimate uses of the sea, impairment of quality for use of sea water and reduction of amenities”.<sup>6</sup>

Noise is a form of energy and causes deleterious effects to marine life and, thus, the UNCLOS’s definition of pollution must, undoubtedly, include noise. Many regional and international bodies support the view that noise is a form of energy which can cause deleterious effects to marine life and that noise, therefore, falls within the UNCLOS definition of pollution. The European Union (EU), for instance, expressly defined underwater noise as a form of pollution in its 2008 Marine Strategy Framework Directive (MSFD) at Article 1.<sup>7</sup>

Chapter XII of the UNCLOS calls on states to enjoy their rights in a sustainable and environmentally-friendly manner. Under Article 192 UNCLOS, states have the duty to protect and preserve the marine environment. States must also take all necessary measures to prevent, reduce and control pollution of the marine environment from any source, as per paragraph 194(1) UNCLOS. Under paragraph 194(2), states have the duty to address transboundary pollution. This paragraph is relevant for noise given

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<sup>5</sup> Linda S Weilgart, ‘The Need for Precaution in the Regulation and Management of Undersea Noise’ (2007) 10(3) J Int’l Wildlife L & Pol’y 247, 251.

<sup>6</sup> Third United Nations Convention on the Law of the Sea (adopted 10 December 1982) 1833 UNTS 3 (UNCLOS).

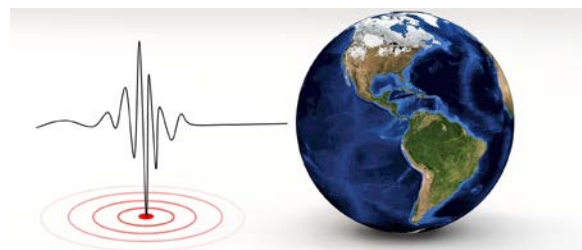
<sup>7</sup> Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive) [2008] OJ L 164/19, art 1, Annex I, and Annex III, Table 2.



that noise is a transboundary pollutant, able to span, for instance, 400 km or more in parts of the Arctic Ocean.<sup>8</sup> And under paragraph 194(5) UNCLOS, states have the duty to take measures to reduce pollution affecting the habitats and ecosystems of rare, fragile and endangered marine species.

In recent years, organizations have become more active in managing underwater noise. For instance, the Agreement on the Conservation of Cetaceans in the Black Sea, the Mediterranean Sea and Contiguous Atlantic Area (ACCOBAMS) and the International Maritime Organization (IMO) have developed comprehensive noise guidelines.<sup>9</sup> In addition, the CMS, ACCOBAMS and the Agreement on the Conservation of Small Cetaceans of the Baltic, North East Atlantic, Irish and

North Seas (ASCOBANS) have established the Joint Noise Working Group to effectively manage noise,<sup>10</sup> and with the MSFD the EU has created one of the few legally binding instruments addressing noise.<sup>11</sup> Regional Seas Programmes have also taken steps to address noise pollution. For example, the Barcelona Convention adopted the Offshore Protocol to address pollution deriving from seismological exploration and exploitation of seabed activities.<sup>12</sup> Unfortunately, the UN's work has been inadequate in this field, with the General Assembly mainly repeating a yearly call for scientific data-gathering on underwater noise.



<sup>8</sup> Anna Nowogrodzki, 'Global Warming Is Changing How the Ocean Carries Sound', Hakai Magazine (18 January 2017) <<https://www.hakaimagazine.com/news/global-warming-changing-how-ocean-carries-sound/>> accessed 28 January 2018.

<sup>9</sup> ACCOBAMS (Agreement on the Conservation of Cetaceans in the Black Sea, Mediterranean Sea and contiguous Atlantic), *Guidelines to address the impacts of anthropogenic noise on cetaceans in the ACCOBAMS area*, MOP4 Res 4.17 (2010) and IMO (International Maritime Organization), *Guidelines for the reduction of underwater noise from commercial shipping to address adverse impacts on marine life*, IMO Doc MEPC.1/Circ.833 of 7 April 2014, para 1.1.

<sup>10</sup> ASCOBANS (Agreement on the Conservation of Small Cetaceans of the Baltic and North Seas) Joint Noise Working Group, *Report of the Joint CMS/ACCOBAMS/ASCOBANS Noise Working Group (Joint NWG)*, AC22/Doc 4.2 (2015) <[http://www.ascobans.org/sites/default/files/document/AC22\\_4.2\\_Report\\_NoiseWG.pdf](http://www.ascobans.org/sites/default/files/document/AC22_4.2_Report_NoiseWG.pdf)> accessed 28 January 2018. See also CMS (Convention on the Conservation of Migratory Species of Wild Animals), *CMS Family Guidelines for Environmental Impact Assessment for Marine Noise-generating Activities, Draft for Consultation* (2016) <[http://www.cms.int/sites/default/files/basic\\_page\\_documents/CMSFamilyGuidelines\\_EIAMarineNoise\\_ConsultationDraft\\_English.pdf](http://www.cms.int/sites/default/files/basic_page_documents/CMSFamilyGuidelines_EIAMarineNoise_ConsultationDraft_English.pdf)> accessed 28 January 2018.

<sup>11</sup> EC Marine Strategy Framework Directive (n 8) art 3, Annex I and Annex III, Table 2.

<sup>12</sup> Protocol for the Protection of the Mediterranean Sea against Pollution Resulting from Exploration and Exploitation of the Continental Shelf and Seabed and its Subsoil, 1994 (entered into force 23 March 2011) (Offshore Protocol).

## Legal regimes for noise specific to the Arctic

Efforts to address anthropogenic noise in the Arctic are close to non-existent. Given only recent, and limited, access to Arctic waters, this is not surprising. But with a high likelihood that the Arctic will witness increasing industrial activity and exploration, noise pollution should be on the agenda of the five Arctic coastal states - namely, Russia, Norway, the United States, Denmark (via Greenland) and Canada. Noise was first discussed at the Arctic level in 1991 through the Arctic Environmental Protection Strategy (AEPS, or Finnish Initiative) and the Declaration on the Protection of the Arctic Environment.<sup>13</sup> The AEPS was the precursor to the Arctic Council (AC). The AEPS identified underwater noise as a problem and priority and recommended that mitigation measures be taken, along with the collection of further scientific data.<sup>14</sup> Following the establishment of the AC, the Arctic Monitoring and Assessment Programme (AMAP) was entrusted with the AEPS' functions. However, the AMAP removed noise pollution from its agenda in 2000 and at the Second AMAP

International Symposium on Environmental Pollution of the Arctic in October 2002 noise discussions were absent.<sup>15</sup>

In its 2009 Arctic Marine Shipping Assessment, the Protection of the Arctic Marine Environment (PAME), the Working Group of the AC which works on improving sustainability of the Arctic marine and coastal environments, recommended that the Arctic states begin conducting studies on the effects of noise on cetaceans in the Arctic and that, where necessary, the Arctic states work with the IMO to develop measures to mitigate against noise impacts.<sup>16</sup> The Conservation of Arctic Flora and Fauna (CAFF), the biodiversity Working Group of the AC, has not yet conducted any work on underwater noise.

The IMO Guidelines for the reduction of underwater noise from commercial shipping to address adverse noise impacts on marine life (IMO Guidelines) are a good start to addressing anthropogenic noise in Arctic waters: they recommend noise mitigation technologies for commercial ships, as well as speed reduction measures. Noise-quieting technologies can

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<sup>13</sup> Arctic Council, *Arctic Environmental Protection Strategy* (Arctic Council, 1991). See also Timo Koivurova and David VanderZwaag, 'The Arctic Council at 10 Years: Retrospect and Prospects' (2007) 40(1) UBC L Rev 121, 124.

<sup>14</sup> Ibid 16, 22 and 28.

<sup>15</sup> Elena McCarthy, *International Regulation of Underwater Sound: Establishing Rules and Standards to Address Ocean Noise Pollution* (Kluwer Academic 2004), 156-157.

<sup>16</sup> Arctic Council, *Arctic Marine Shipping Assessment Report 2009 Report*, 7 <<https://oaarchive.arctic-council.org/handle/11374/54>> accessed 28 January 2018.

effectively reduce vessel-source noise. For example, the Norwegian research icebreaker Kronprins Haakon is presently being constructed by Italian shipbuilder Fincantieri to include advanced technology to significantly reduce noise waves so that the marine species being studied by the researchers are not harmed.<sup>17</sup>

However, the IMO Guidelines alone are insufficient for protecting Arctic marine biodiversity. Firstly, the IMO Guidelines are not specific to the Arctic: the physiology of noise waves in the Arctic varies greatly as compared to other oceans, with sound waves travelling large distances in Arctic waters, and Arctic marine life is particularly sensitive to climate change and human activities. The IMO Guidelines also contain recommendations on noise-quieting technologies and speed reduction measures, but these may be insufficient to protect feeding and reproduction grounds and migratory routes of importance to Arctic marine biodiversity. In addition, the IMO Guidelines are limited to commercial shipping<sup>18</sup> and they are not legally binding.

Questions might also arise surrounding the role that other IMO instruments play in addressing underwater noise in the Arctic. The International Convention for the Prevention of Pollution from Ships (MARPOL) provides for the establishment by states of Special Areas to protect the marine environment from pollution due to shipping. However, the MARPOL's definition of pollution includes the discharge of noxious substances but makes no mention of the release of energy.<sup>19</sup> Thus, the MARPOL cannot be used to establish Special Areas to protect against noise pollution.<sup>20</sup> Of perhaps more interest to the Arctic region is the IMO International Code for Ships Operating in Polar Waters (Polar Code) which came into force in January 2017. The Polar Code was a strong step forward in terms of regulating shipping in the polar waters. As the Polar Code was implemented by the MARPOL (as well as the Safety of Life at Sea Convention), the Polar Code also includes noxious substances in its definition of vessel pollution but does not address anthropogenic noise.<sup>21</sup>

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<sup>17</sup> 'Plans on Ice', *Shipping and Marine* 128 (January 2016) 101, 103, <[https://issuu.com/schofieldpublishingltd/docs/shipping\\_and\\_marine\\_issue\\_128\\_janua/56](https://issuu.com/schofieldpublishingltd/docs/shipping_and_marine_issue_128_janua/56)> accessed 28 January 2018.

<sup>18</sup> IMO (n 10) art 2.

<sup>19</sup> International Convention for the Prevention of Pollution from Ships (17 February 1973, as modified by the 1978 Protocol which entered into force 2 October 1983, updated by subsequent amendments) art 2, para 2 (MARPOL).

<sup>20</sup> Papanicolopulu (n 2) 255.

<sup>21</sup> International Code for Ships Operating in Polar Waters, Annex (entered into force 1 January 2017) MEPC 68/21/Add1 (Polar Code)

## Conclusion

The legal regimes in place to address noise described in this paper showcase the lack of or gaps in regulation of anthropogenic noise in Arctic waters. Awareness of the impacts of noise on biodiversity is, however, slowly gaining track as international and regional bodies begin to take action. Due to the unique properties of noise, a better understanding of the harm that noise can have on Arctic marine life is required and, in particular, further scientific data needs to be collected. In this respect, the role of the AC in addressing anthropogenic noise cannot be understated. The AC has a strong history of conducting scientific research and, with Working Groups like the PAME and the CAFF, is well-placed to gather baseline data on the impacts of noise on Arctic whales. Based on the scientific findings, the AC could then consider appropriate policy guidelines for managing underwater noise in the Arctic.

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# A framework for location-sensitive governance as a contribution to developing inclusivity and sustainable lifestyles with particular reference to the Arctic

*Patrick Dillon\** and *Dawid Bunikowski\*\**

The paper outlines a provisional framework for location-sensitive governance to promote inclusive decision making and sustainable lifestyles. Generalized sensitivities to location in places people live and work are modelled as cultural ecologies to reveal how localized adaptations and customary ways of doing things can be reconciled with national and transnational legislative and organizational structures. Good practices in integrating 'custom' and 'statute' has been developed in nomadic communities in the Arctic and general principles from these communities have been incorporated into the framework.

The cross-disciplinary approaches to research and the methods used in applying the framework to practical situations are explained.

A framework for cultural ecology is a work in progress and its central tenets have been developed in earlier papers, e.g. Dillon (2015, 2017), Dillon and Kokko (2017). A provisional alignment of cultural ecology with customary law as a basis for legal pluralism is given in Bunikowski and Dillon (2017). We have drawn on all of these publications in presenting our case for location-sensitive governance in the current paper. The paper reflects the understanding we have developed through cross-disciplinary cooperation. Our intention is to outline the research and bring it to the attention of the wider academic audience of Arctic lawyers and social scientists. In this sense, the paper plays an informative role to cordially encourage scholars mostly, but not only, from the Nordic countries to contribute ideas and help extend and refine this new field of research. We have found that combining perspectives from different backgrounds and disciplines has enabled us to take an original, and we hope significant, look at the relationship between customary law and legal pluralism in the Arctic, and to

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frame it through cultural ecology as a radically different way of approaching inclusivity and sustainable lifestyles.

In recent decades, industrialized nations have seen unprecedented economic and social mobility. The old links between labor and the land have largely been severed. Families tend not to stay long enough in one place for intergenerational traditions to develop as once they did around special places and practices. Places that were once 'special' no longer have discernible continuity from generation to generation. These trends have prompted a movement known loosely as 'localization', which in turn is closely allied to the growing interest in 'sustainability', both of which are concerned with re-connecting people with the particularities of the places in which they live. Together, localization and sustainability have a focus on optimizing the fit between the lifestyles of people in a given environment and the sustainable utilization of resources in that environment. They are also a step towards location-sensitive governance, of how democratic processes might be meaningfully devolved so that people have a stake in the policies and laws which govern their lives.

'Location-sensitive governance' is the key idea in this paper. It is important because: (i) it promotes more inclusivity in the democratic process, enabling

people to have a 'voice' in decisions about what happens in their locality; and (ii) it enables sensitized application of policy to local matters, enabling a more nuanced response to, for example, the challenges of responding to changes in the environment resulting from the changing climate, or of accommodating immigrants into a society and helping them integrate. Location-sensitive governance recognizes that people engage with their surroundings both 'formally', within local, national and transnational legislative and organizational structures, and 'informally' through their day-to-day activities. The theoretical underpinning of location-sensitive governance comes from an integration of cultural ecology with customary law.

Cultural ecology is closely allied to anthropology and sociology but differs subtly from them in having a focus on the transactions between people and the material, social and psychological resources of the environments they inhabit. Every human situation is a cultural ecology: social groups, communities, institutional structures, land-use systems, are all cultural ecologies. Cultural ecologies can be modelled at scales ranging from the very local to the global. At the level of the individual, cultural ecology can be thought of in terms of ways of 'being in the world', the interplay between how people experience the world and how

they come to understand it. Collectively, cultural ecology takes in not just ways in which people engage with their physical surroundings through economic activities, it includes social relations and the collective capabilities of all the people who inhabit it, their lifestyles, beliefs, ideas and aspirations. Generalized cultural ecological relationships are based on fundamental ideas in phenomenology (Lloyd, 2004), broadly confirmed by research in neuroscience (Eagleman and Downar, 2016). They can be shown through a series of diagrams.

The general relationship is represented in figure 1. The three intersecting lines forming a star shape in the right-hand side of the diagram represent formal transactions between people and their environments. Enclosing the star within a circle signifies that the transactions take place within a given 'context'. Behaving within a context is a 'relational'<sup>1</sup> process, i.e. it is informed by previous experiences and accumulated knowledge. Relationally driven behavior enables distinctions to be made between one situation and another.

However, something else is happening as individuals interact with their environment. In addition to the relational context, unique, personal contexts are simultaneously created. These additional contexts are a property of the uniqueness of individual moments; they are literally constructed out of the ways in which individuals engage with the affordances of their environment as they exist at that time: the individual, the environment and the context all co-construct each other. This is called a 'co-constitutional'<sup>2</sup> process to distinguish it from the relational process. The three lines forming a triangle in the left-hand side of the symbol represent the co-constitutional process: individual, environment and context co-constructing each other. As soon as co-constitutional interactions occur they immediately interact with relational constructs, in other words people rationalize and conceptualize what they are doing. By definition, the co-constitutional exists only 'in the moment'; it is fleeting, but its influence can be profound. Creativity, improvisation, ingenuity, insight, etc. typically occur 'in the moment' or in the

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<sup>1</sup> Relational, derived from: (i) 'relation' meaning belonging to or characterised by; and (ii) 'relative' meaning compared to.

<sup>2</sup> Co-constitutional, derived from 'constitute' meaning the whole made from its contributing parts where all of the parts are actively involved in the process. In its cultural ecological use, the word works well enough in English, but in some languages, it has no equivalent meaning. Care must be taken not to confuse the cultural ecological use of [co-]constitutional with the word 'constitutional' as it is commonly used in law, i.e. as a decree, ordinance, or regulation usually emanating from a higher authority. In cultural ecological terms, a regulation emanating from a higher authority would be 'relational'; a co-constitutional regulation would be one originating from the people as a whole.

‘flow’. The interrelationships between relational and co-constitutional contexts are shown by enclosing the symbols for each process in circles and then overlapping the circles. But the relationship is more than one of overlap. The relational and co-constitutional are continually re-structuring each other in ways that are themselves relational and co-constitutional. This reciprocal relationship between spontaneity and rationality is represented by two mutually referring arrows placed in the intersection of the two circles.

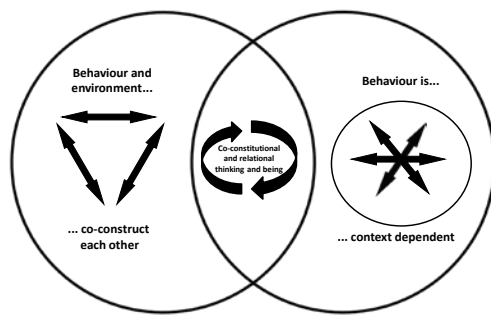


Figure 1. The cultural ecological dynamic

A key element in this framework is the differential interplay between the co-constitutional and relational ways of being in the world. This differential is particularly evident in the ways in which nomadic peoples engage with their environment, the decisions they have to make as they negotiate sometimes hostile environments and derive a living from them. Our contention is that through a better understanding of this ‘nomadic interplay’ we can develop

practical recommendations for location-sensitive governance.

Nomadism refers to a lifestyle where people move from place to place, taking their possessions with them, and making a living from the resources of the environment immediately to hand. As a way of life, it is continuously compromised by the economic dominance of settled lifestyles. Few people now are wholly nomadic, so the term is taken to include groups who move periodically on hunting expeditions, to manage their livestock (i.e. pastoralism, Ingold, 2008), or to exploit a seasonal resource. Despite its rapid decline globally, nomadism offers an important perspective on problems associated with human impact on the environment. However, most of this interest centers on the apparent benign relationships between nomadic people and the environments they inhabit. Cultural ecology does not romanticize nomadism, nor does it see it as representing something ‘different’ or ‘other’. Rather it conceptualizes nomadism as a lifestyle lying at one end of a continuum of possible engagements between people and their environments. The nomadic end of the continuum is characterized by transactions between people and the primary resources (landscapes, plants, animals) of the environments concerned and the lifestyles and value systems associated with living off those resources. Urban

lifestyles with high energy demands, consumption of secondary (manufactured) resources and dependence on the provision of services, are at the other end of the continuum.

As a nomadic group travels through a landscape, some of the collective and cumulative decisions its members make as they go about their daily activities become strongly associated with certain places. Over time these places may accrue some collective significance or special meaning. Through such processes, everyday activities interweave with accumulated knowledge, stories are told, traditions develop. The stories and traditions are more than just narratives and routine practices; they embody collective understandings of place and create social cohesion (Ingold, 2000; Pentikäinen, 2006).

The customary ways of being in the world developed by nomadic peoples are the result of localized adaptations over many generations through a continuous interplay between in the moment behaviors and established ways of doing things. Although they are the basis of social order, they may or may not be consistent with statutory laws. Customary ways of being in the world are typically oral, spoken, and unwritten. They are part of cosmologies based on long-standing beliefs and understandings held by nomadic

peoples about their place in the world. Like the cultural ecological relations outlined earlier, they are based on the principle of reciprocity: a constellation of mutual relationships, obligations and duties among people in a given community (Mustonen and Syrjämäki, 2013).

The western, industrialized notion of the nation state emphasizes relational thinking and relational ways of being and thus privileges systematically defined organizational and legal structures that determine how we engage with our surroundings (see e.g. Ch3. in Humphrey and Sneath, 1999). These structures attempt to reduce uncertainty and 'fix' the cultural ecological dynamic in favor of the relational in the name of stability. Regulatory structures are developed externally to the cultural ecological system to which they will be applied. Legislative practices and laws are specified and take precedence over the co-constitutional day-to-day concerns of the people (which have reduced status in the overall framework, signified by the reduced size of the co-constitutional symbol in the left-hand circle in figure 2).

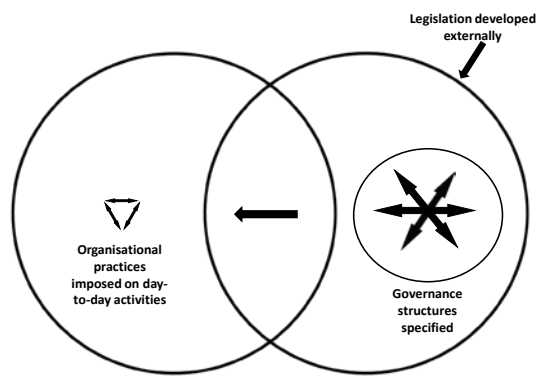


Figure 2. A cultural ecology dominated by relational forms of legislation, governance and law

This centralized, relational control dilutes the imperative of addressing the particularities of locality, of the ‘in the moment’ experiences of individuals. In some environments adaptability, dealing with situations as they arise, is as important as stability. For example, Dillon et al. (2012) have shown how local knowledge is important in developing resilience to the flooding which now occurs in the UK as a result of extreme weather. Individuals and groups, no matter how defined, represent different configurations of the relational and the co-constitutional, different configurations between people and the resources of their environment. There is a constantly adapting dynamic between co-constitutional and relational ways of being. To be truly adaptive, and by definition democratic, the cultural ecology needs to reflect a functional balance between the interests of the state, represented through statutory law and regulatory mechanisms, and the

localized necessities of people, represented through customary ways of being in the world (figure 3).

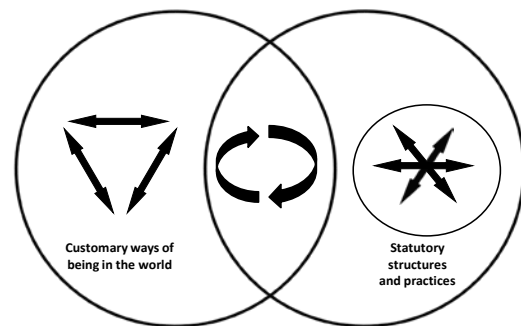


Figure 3. A localized cultural ecology

Here a localized cultural ecology is seen as the co-existence of statutory, legal (i.e. ‘relational’) contexts derived from the application of externally derived legislation, representing the ‘objective’ will of the people in the nation state, alongside the localized contexts generated through the co-constitutional processes of people living and working within the particularities of their environment. The dynamic between the two contexts is complex: day-to-day activities that give rise to practices that are functionally adaptive eventually become ‘established’, i.e. they become ‘customary’ ways of doing things and thus take on some ‘relational’ qualities, i.e. ‘we do it this way rather than that way’. And if state law is to ‘work’ it has to be applied in ways that are sensitive to local conditions, i.e. it has to be co-constituted with local beliefs and



practices. Such a configuration recognizes and acknowledges the bigger picture but at the same time seeks an accommodation that reflects a temporally dependent dynamic between site, location, place and space. This is adaptive rather than categorized culture ecology.

‘All law begins with custom. Anthropologists know this’, says Bederman (2010, 3). Bederman distinguishes ‘binding customs’ from ‘mere habits of a group, or subgroup, in a particular society’. The recognition of such ‘customary’ laws is a crucial element that stands against legal positivism. Indigenous people living in the northern part of the Americas, in Latin America and in the European North have developed their own systems of laws, rules, customs, traditions and beliefs over a period of centuries. Their laws cannot be separated from their religions, cosmologies etc. A customary rule comes from a tradition based on common longstanding beliefs and understanding of the world and of the universe. Llewellyn (1940, 1400) <sup>3</sup> recognized that the Cheyenne nation had developed a well-organized legal system in their community crucial to their survival. The system expressed

their beliefs and experience (their common sense) or traditional knowledge. Experience teaches that customary laws are inseparable from indigenous peoples, there is something intrinsic that produces such a law. Law always implies both respect for the matter in question and the possibility of enforcement or exclusion if it is not upheld. Unwritten legal rules are as legitimate as written ones. This is the basis of legal pluralism.

Legal pluralism has a past history in northern Europe (Ahren, 2004, 76-80; see also Svensson, 2002, 6-13; Svensson, 2005, 52-56; Bunikowski and Dillon, 2017, 45-51; Bunikowski, 2014, 77-85). Ahren observes that the cultural hierarchy theories that were routinely implemented by the Nordic countries in the past compromised the traditional Sámi way of life and their customary laws, because the nation state had no room for non-Germanic oddities such as Sámi traditions, customs and laws (Ahren, 2004, 83-92). <sup>4</sup> The Hobbesian and Lockean understanding of sovereignty and a Lockean attitude towards Native Americans might have had some influence on ‘Fennoscandinavian politicians, legal scholars, or anthropologists’ (Ahren, 2004, 81-82).

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<sup>3</sup> He uses the concept of ‘general ruling on the community’.

<sup>4</sup> There is an analysis of the implementation of such theories on cultural hierarchy in relation to legislation and to the practice of law from the beginning of the 19<sup>th</sup> century to the 20<sup>th</sup> century in Fennoscandia (or Fennoscandinavia).

By building on and integrating perspectives from cultural ecology and customary law, we make a revised and stronger case for legal pluralism as the basis for location-sensitive governance. Our specific concern is with the sparsely populated landscapes within the Arctic Circle. There are two reasons for this: (i) here the impacts of climatic and associated environmental changes on resources and lifestyles are profound, and (ii) there exists, in the way Sámi customary law interacts with statutory law, an established foundation on which to build new models of legal pluralism and location-sensitive governance. However, it should be emphasized that the potential application of our framework is not confined to the Arctic Circle and indigenous peoples; we anticipate that it will have utility in any situation where it is necessary to reconcile the lifestyles of people locally with the economic demands of the wider population.

The Sámi in Finland do not own their traditionally occupied and inhabited territories in terms of public law, the land does not belong to the Sámi as a nation. The Sámi enjoy cultural autonomy "to maintain and develop their own language and culture" (chapter 1, section 17 of Finland's Constitution of 1999), that in practice is limited to protection of linguistic rights at schools and in public administration (compare: chapter 11, section 121). The

Sámi do not manage fishing waters, hunting grounds, public forests, and reindeer pastures in their indigenous areas. In terms of developing our framework, we are interested in historical precedents and ongoing negotiations about land rights and sacred sites because out of these we will extract general principles. Nowadays, the problem is not only how to recognize Sámi customary laws concerning natural sacred sites but much more how to protect natural sacred sites understood as both spiritual and physical entities in terms of the state or official law.

In Canada's British Columbia, the Nisga'a, who are one of the First Nations, enjoy a democratic and accountable self-government (see: chapters 2, 3 and 11 of The Nisga'a Final Agreement). Their agreement with the Canadian government is one of the latest on self-government and land claims, which is why it is so advanced. Nisga'a have their own government, jurisdiction, constitution, laws, citizens, corporations, self-government in their villages, other authorities like police, and natural resources management (Bunikowski and Dillon, 2017, 52). Some examples from the Nisga'a Treaty: "Nisga'a citizens have the right to practice the Nisga'a culture and to use the Nisga'a language, in a manner consistent with this Agreement"; "the Nisga'a Nation owns Nisga'a Lands in fee simple, being the largest estate known in law. This estate

is not subject to any condition, proviso, restriction, exception, or reservation set out in the Land Act or any comparable limitation under any federal or provincial law. No estate or interest in Nisga'a Lands can be expropriated except as permitted by, and in accordance with, this Agreement"; "the Nisga'a Government will develop processes to manage heritage sites on Nisga'a Lands in order to preserve the heritage values associated with those sites from proposed land and resource activities that may affect those sites".

The Sámi and Nisga'a cases, outlined above, illustrate how the theory of cultural ecology (by Dillon) has been recently applied in considerations of "the right of indigenous peoples to their own law" (Bunikowski, 2017, 57-58). The argument from cultural ecology and, in particular, 'co-constitutional'/'relational' forms of meanings was used in "supporting the own law of indigenous peoples". In Bunikowski's words, "(...) customary laws are a good example of the *first way* of thinking or of rules, in other word rules that are compatible with adaptations to the environment, while all state rules and laws are always relational and thus imposed without any consideration of the processes of adaptation. The rules developed in the North in circumstances related to, for example, 'why is this a good place for summer grazing my herd', 'what traditions inform how people should

behave in this place', 'what are my responsibilities during the time I occupy this place', are good 'co-constitutional' exemplifications" (Bunikowski, 2017, 58).

The distinction between 'co-constitutional' and 'relational' forms of meanings or modes of thinking in how people interact with their environments outlined earlier in this paper are highly relevant to reconciling customary and statutory laws in ways which have led to the Nisga'a Agreement. The co-constitutional mode results from highly localized adaptations, of interactions between specific behaviors and specific environmental conditions. It is the same with customary laws. The relational mode is about relations between behaviors and organizational structures. Organizational structures contain generalized rules that are external to the environments in which people are living; they have to work constructively with customary laws if location-sensitive governance is to be achieved. We are looking for new configurations of behavior and environment. The so called 'Fourth World' of the Arctic Circle is a circum-global, pan-Arctic region which includes the northern parts of some Nordic countries. Nordic countries have access to Fourth World ways of engaging with the environment which transcend notions of inter- and multiculturalism and the ideological tensions associated with them.' (Dillon

et al. 2013, 97). Both ways of thinking (categories, rules, and the worldviews) – the co-constitutional and the relational – are comprehensive and complementary. We need both in contemporary societies, but we must understand the differences between them and find frameworks for bringing them together. What follows, is an outline of a provisional research framework to address these matters.

Customary laws are ‘situated’ in the cultural ecology and thus situational analysis is the methodological framework typically used to investigate the significant people-environment transactions. Situational analysis covers the three fundamental elements of a ‘given situation’ proposed by Robson and McCartan (2015): (i) the important aspects of the situation to those involved; (ii) the meaning these aspects have for those involved, and (iii) the effects they have on those involved and on others. Situational analysis based on these elements identifies significant environmental (cultural, social, economic etc. as well as physical) characteristics and their relationships with the actors involved.

Situational analysis requires a mixed-method approach, recognizing on the one hand that people experience, understand and conceptualize the world around them in qualitatively different ways, and on the other hand there are bodies of collectively agreed,

disciplined, knowledge and organizational structures. In the first, the meaning arising from a situation is contingent on that situation (i.e. the two are co-constitutional) and it is thus essentially phenomenological. In the second, meaning arising from a situation may be related to disciplined knowledge and organizational structures through processes of literature review, documentary analysis, critical review and corroboration.

The cultural ecological approach seeks to avoid the dualities that frequently exist between these two representations of experience and knowledge. It does this by recognizing that enacted experience and disciplined knowledge are constantly reforming each other in ways which are themselves relational and co-constitutional. Scientific understanding of the world is derived through cumulative organization and rearrangement of experientially acquired understandings of the world (Marton, 1993). This is compatible with Husserl’s (1954) ‘phenomenological tradition’ and its more recent representations in, for example, the work of Varela, Thompson and Rosch (1991) and Thompson (2007) who argue that life and mind, experience and cognition, share a core set of formal, self-organizing properties.

Structures of experience and the enacting of customary laws may be

revealed through the application of participant ethnographic methods to investigating the ways in which individuals make meaning and construct knowledge, i.e. how they enact experience and how they conceptualize the world around them; how their tacit aspects of the world are systematized, made explicit. Ethnographic methods include narrative approaches (Gubrium and Holstein, 2008), biography (Goodson and Sikes, 2001) and empathy-based approaches (Eskola, 1998) where individuals express their understandings through stories and life histories. Also, how place-based traditions are developed and maintained, for example: the use of metaphor in the creation of meanings (Oberfalzerová, 2006); the physicality and sensitivity of engagement (Laplantine, 2015); periodicity and the role of seasonal rhythms (Groom, 2013).

National and transnational frameworks can be established through analysis of relevant statutory law and case law standards for the protection of cultural heritage and minority rights, nation state legal acts and statutory local laws like land-use planning acts and administrative decisions or policies as they are applied to specific communities, and experiences with legal standards, governmental policies and public participation in natural resources management from case studies of

jurisdictions, for example in Canada's British Columbia or Newfoundland.

Ethnographic investigations are mapped against the analysis of legal documentation to provide a basis for preparing strategies, pedagogies, processes and tools to support location-sensitive governance. These resources are generated out of the interaction between localized, lived experience and customary law, and the formal structures of disciplined knowledge and statutory law. The emphasis is on resources that afford localization and sustainable living. Here we are primarily concerned with relationships between local (co-constitutional) knowledge and ways of doing things, and the structures of (relational) statutory law and the behaviors implied in these structures (Aikenhead and Jegede, 1999). The strategies, pedagogies, processes and tools can be consolidated into practical guidelines for the application of location-sensitive governance, i.e. 'a legal-pluralistic model'.

The integration of cultural ecology with customary law is a new and bold attempt at a framework to facilitate a redistribution of responsibilities in decision making processes, giving a voice to local people without destabilizing democratically agreed governance structures.

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# Improving Public Participation in Greenland Extractive Industries<sup>1</sup>

*Anne Merrild Hansen & Rachael Lorna Johnstone\**

This contribution is based on a seminar and workshop on public participation processes related to extractive industries in the Arctic, organized by the Arctic Oil and Gas Research Centre at Ilisimatusarfik (University of Greenland) on October 17th and 18th 2017. The seminar was led by experts on extractive industries, indigenous peoples, impact assessments, law, and public participation. They came from Greenland, Denmark, Iceland, Norway, Russia, Scotland, England and Brazil. The seminar was open to the public and was well attended by representatives from the ministries, municipal governments, academic and research institutes, NGOs and others. A select group of invited experts and a group of graduate students from Ilisimatusarfik took part in the workshop.

## Legal requirements for public participation in the licensing processes

Public participation in relation to development of extractive industries in Greenland is governed through the Mineral Resources Act and the related impact assessment regulations. The present impact assessment system was implemented during the past ten years and is therefore still relatively young, but as some extractive projects have already been implemented and several more proposed, the management regime has had to mature fast. The impact assessment system follows international standards and public participation is an inherent component in the processes of both social and environmental impact assessments. Extractive companies applying for licenses must conduct impact assessments as part of their licence applications. For mining, this is only required when the applicant seeks a production licence. However assessments are required prior to some exploration activities for hydrocarbons (such as seismic testing) if they could cause significant impacts and always in advance of exploratory drilling or production. Social impact assessments are also required before exploratory drilling and hydrocarbon production. An overview of the general development

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<sup>1</sup> The text of this contribution is based on a Briefing Note on the same topic, published on the Arctic Oil and Gas Research Centre website, which summarizes the key lessons identified on how to improve public participation processes in Greenland.

\* Directors, Arctic Oil and Gas Research Centre

steps for an extractive project can be seen below.

for permissions to mine or conduct exploratory drilling, then there is a risk that people will not take part in public participation processes or will not be able to do so effectively. A lack of information during the early stages of

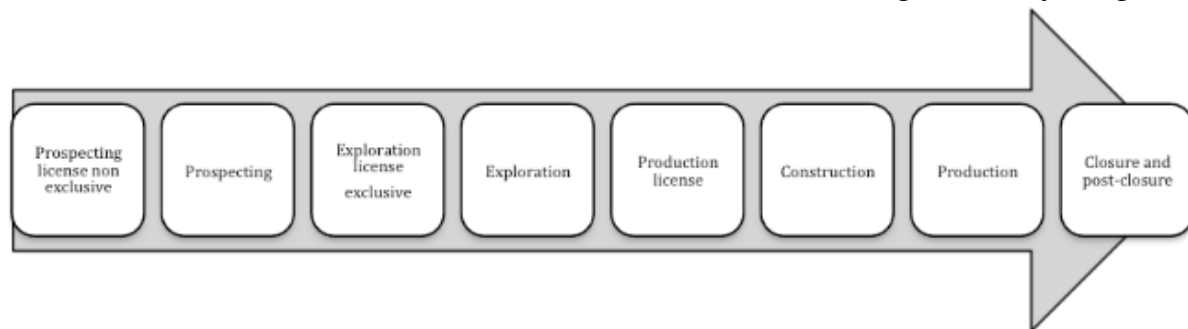


Figure 1. Overview of lifecycle of an extractive project (Source, Hansen et al. 2016)<sup>2</sup>

### Early preparation of locals and capacity building

Knowledge exchange during public participation processes is essential for locals to be able to adapt to and benefit from extractive projects. Knowledge exchange is needed, for example, to facilitate transparency and secure that local knowledge and concerns are taken into consideration in decision-making processes and project development.

The premise for knowledge exchange is dialogue between the involved parties. Capacity for people to enter a dialogue on a topic requires an initial understanding of the subject. If information is not provided *in advance* of public meetings when companies apply

development can also create mistrust from the public towards regulatory authorities and companies. As one stated during the seminar: *"We want to be the first to know if something is happening in our area"*. If people are not provided access to objective and balanced information early in the process, then experiences show that they will seek information from alternative sources, most often the internet. It can be difficult to filter information and identify reliable sources on the internet and this can in the end cause confusion and frustration and disturb the dialogue. As one stated at the workshop: *"It is not only about having the right to participate it is also about using that right. But using that right requires capacity to do so. We need to build knowledge and interest to be able to learn and consume information."* If people don't have basic information in advance, the "consultation" meeting is in fact a one-way "information" meeting – the

<sup>2</sup> <http://dx.doi.org/10.1016/j.exis.2015.11.013>

companies and authorities “tell people” about their plans – often for the first time – so there is no time to digest the information and respond. The Arctic Oil and Gas Research Centre therefore proposes that initiatives are taken by actors such as authorities, research institutions, educational institutions and the media to inform and engage the public about extractive projects before or during early exploration. Meetings could be scheduled in East, North, South and mid-Greenland every second or third year during which governmental representatives and independent experts explain projects in development, with an emphasis on local projects. These meetings would be quite distinct from the project specific impact assessment consultations.

*Proposal 1: That initiatives are taken by actors such as authorities, research institutions, educational institutions and the media, to inform and engage the public about extractive projects before or during early exploration.*

### **Sharing grassroots expertise**

Another way of building capacity discussed at the workshop is development of community guidelines on how locals can themselves prepare for development and engage proactively in decision-making and impact

assessment processes. Such guidelines, it was stressed, cannot be designed solely by academic experts but should draw from experiences of people from other areas in the Arctic who have lived through extractive projects. Such grassroots experts can share first-hand accounts of how extractive projects have affected their settlements, how they have balanced interests between different groups, and what they might do differently if facing a new development project. Such grassroots experts have the advantage of being able to talk authoritatively about social impacts in ordinary language and would also likely be perceived as untainted by bias. Grassroots experts could complement the scientific experts and provide another perspective on what developments mean for local communities.

The Arctic Oil and Gas research Centre proposes that during the consultation phases in impact assessment processes, people are given the opportunity to meet with or hear from people from other communities where exploration and/or production of minerals or hydrocarbons have taken place from other parts of Greenland. They speak Greenlandic and as it was stressed: “Who are better to talk about what to expect and what to talk about and foresee?”

*Proposal 2: That during the consultation phases in impact assessment processes, people are given the opportunity to meet with or hear from people from other communities where exploration and/or production of minerals or hydrocarbons have taken place.*

### **Safe fora for open dialogue**

Another issue stressed during the workshop discussion is the need for public participation and debate to take place in fora where people feel that sharing is safe: both in relation to feeling free to express critical opinions toward the projects and in opposing the opinions of other locals. Some participants expressed concerns about their fear of bullying or exclusion from social networks if they spoke up against a popular view or a view held by people they regarded as powerful. People also need to be confident that their input is not misused, for example, used to legitimise projects they do not support. Safe fora also mean that public participation should take place in an atmosphere where people feel comfortable to talk about issues that may be sensitive to them. As one workshop participant stated, “We need a safe space to debate, to feel comfortable”. Larger fora and public meetings do not always motivate people to share their thoughts.

The Arctic Oil and Gas Research centre proposes that public participation fora be redesigned in a manner that makes people feel safe and for information shared to be treated with a degree of sensitivity: in some cases confidentiality or anonymously as necessary.

*Proposal 3: That companies and authorities consider how to accept and consider confidential information and to facilitate anonymous submission of views.*

The number of people in a room during meetings also influences willingness to enter a dialogue or share thoughts: we recommend that companies and authorities hold smaller, targeted meetings to ensure both a safe space and to encourage people to speak up.

*Proposal 4: That companies and authorities consider how to hold smaller, targeted meetings to ensure both a safe space and to encourage people to speak up.*

### **Learning from former and present projects in Greenland**

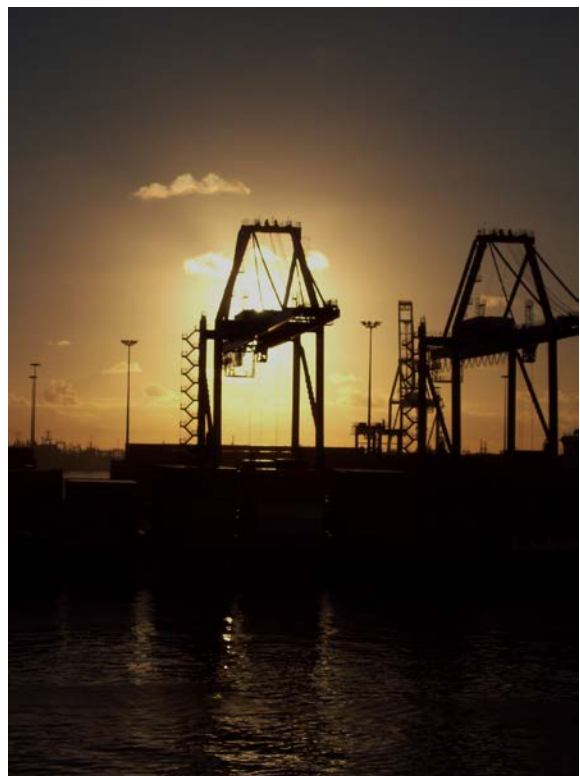
During the workshop, different issues came up which pointed towards the



need for more research in, about, and for Greenland. It was pointed out that there is a lack of systematic evaluations of the former and present extractive projects. In order to understand how further to improve public participation, lessons may be learned from former extractive projects (also from the projects that never made it to the production) in Greenland. For example in order to ensure that the majority participates, it is necessary to know first of all who is participating now and, even more importantly, which groups are not participating.

The Arctic Oil and Gas research Centre proposes that an evaluation is carried out to inform project management. This could include investigations of what the public participation processes have focused on, how they were carried out and what they lead to in practice. It could also examine social impacts, especially unexpected impacts, and community responses to changes. The evaluation could be made in collaboration between university researchers, government officials and companies to jointly decide on the scope and methods and work together on data interpretation and analysis.

*Proposal 5: That initiatives are taken to evaluate former extractive projects in Greenland and consider what lessons can be applied for future management.*



# Report on fundamental and human rights research in Finland, HRC 2017

*Assi Harkoma\**

The Finnish Human Rights Centre (HRC) has published a very first report on human and fundamental rights research in Finland. Research on fundamental and human rights is vital for ensuring the development and, ultimately, the implementation of human rights. Promoting research on fundamental and human rights is one of the statutory tasks of the Finnish Human Rights Centre (HRC) established in 2012. To carry out this task, the HRC examined how researchers and other experts view the state and future of fundamental and human rights research in Finland in cooperation with the Northern Institute for Environmental and Minority Law of the Arctic Centre, University of Lapland.

The study was conducted by interviewing 24 experienced experts. Information was also gathered with an online survey circulated among universities and other organizations

conducting relevant research. Some 200 responses were received.

The aim of the study was to avoid focusing only and primarily on research conducted in the field of law and instead take into account all Finnish research relevant to fundamental and human rights. Therefore, the study covered research directly focused on fundamental and human rights as well as other research with a fundamental and human rights dimension. The objective was to consider all research scattered across fields and disciplines as a single entity and to ensure that fundamental and human rights research will continue to be defined in broad terms also in the future. This approach may help promote multidisciplinary research on fundamental and human rights.

Overall, experts considered the state of fundamental and human rights research to be good. According to the respondents, Finland has strong expertise in fundamental and human rights research, which has helped the theme to become established among other fields of research during the past few decades. However, research was considered to have a relatively national scope, and it was hoped that researchers will in future publish more at international level.

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\* Project researcher, University of Lapland, Author of the Report on fundamental and human rights research in Finland, HRC 2017

Based on the study, it can be constituted that the volume of fundamental and human rights research is high and its contents are diverse. Critical fundamental and human rights research has an important role in the field. On the other hand, research in this vast and fragmented field is considered 'point-like', meaning that the choice of research topics and the presence of relevant research in different fields may be relatively haphazard and more stagnant than in the 1990s.

Two significant challenges clearly emerged from the data: rights-related expertise and research are often questioned by the central government and in public debate and research funding has been cut. Respondents consider the current social situation to put research under greater strain, fearing this may reduce the volume of research and the range of themes studied.

Therefore, instead of simply defending their own fields of research and fundamental and human rights, the respondents encouraged researchers to examine more thoroughly the reasons behind this change in attitudes extending beyond financial and economic issues. Respondents also called for discussion on how to react to the changing environment.

Respondents hoped that the research field would wake up to the social situation and respond to it with various active measures, for example by participating in societal debate, preventing the polarization of society, considering the choice of research topics and the sourcing of funding from a more strategic perspective and by empowering the research community from within and subsequently utilizing research as a force for building the society. The respondents estimated that this would help prevent the public and decision-makers from seeing fundamental and human rights as an obstacle or hindrance to development and would, instead, help them recognize the integration of rights, for example, in social reforms as a positive aspect that may prevent potential problems.

The survey gathered information on current research. The percentage of fundamental and human rights research among research topics varies greatly. The amount of research focusing on rights is almost equal to the amount of research that primarily focuses on other topics but involves a rights-related dimension. Thus, researchers conducting studies that are relevant to fundamental and human rights include people who consider themselves as fundamental and human rights researchers, people who identify with the field to some extent and people who



primarily identify themselves as researchers in other fields.

Fundamental and human rights research is conducted in a wide range of fields and disciplines. The dominant field is social sciences, with the following subfields being the most popular in terms of fundamental and human rights research: law, public and social policy / social work, educational sciences, sociology/demography, social research, history, linguistics, and women's and gender studies. However, it is noteworthy that research on fundamental and human rights cuts across all fields of science, including humanities, medicine and health sciences, natural sciences, technology and engineering, agriculture and forestry.

Research is conducted first and foremost at universities and their research institutes but also by other actors, such as state research institutes, the Government and ministries, non-governmental organizations, consulting companies and independent researchers. Key organizations conducting research in the field include the Åbo Akademi Institute for Human Rights, the Erik Castrén Institute of the University of Helsinki, the Northern Institute for Environmental and Minority Law at the Arctic Centre of the University of Lapland, faculties of law at the University of Turku and University

of Helsinki, and the University of Tampere. Other universities and universities of applied sciences also carry out research on fundamental and human rights.

Human rights institutes conduct research particularly from the viewpoint of international law and human rights. The Åbo Akademi Institute for Human Rights focuses on classical fundamental and human rights and their promotion while the Erik Castrén Institute carries out theoretical and critical research. The name of the Northern Institute for Environmental and Minority Law describes the unit's research profile well. At the faculties of law at the University of Turku and University of Helsinki, research on fundamental and human rights is conducted particularly within the subject of constitutional law, with an emphasis on fundamental rights. At the University of Tampere, relevant research is carried out especially at the Faculty of Management in the field of public law, focusing on fundamental rights and the European Convention on Human Rights.

Based on the survey, research topics concerning international issues are almost as common as national questions. In terms of content, research still seems to be concentrated with nearly equal shares on civil and political rights and on economic, social and cultural rights.

Both branches are based on traditional international human rights.

The fundamental and human rights research conducted by researchers covers a diverse range of topics. Traditional research topics form a foundation for all research. They include the history, theory and concepts of human rights, the development of basic tenets, individual fundamental and human rights, systems for monitoring rights, and issues concerning citizens, power and policy in general. The rights of various groups of people, linguistic and cultural rights, freedom of expression and other communication rights as well as rights concerning safety and supervision were also brought up. They have emerged as research topics particularly in the context of the online world and new technology. Other fairly new topics include research relating to the environment, globalization and business.

Experts examined future research needs from various perspectives. Some suggested that fundamental and human rights research should be based on principles or wider objectives that would guide and steer research activities in the future. In this context, respondents mentioned research ethics and the reliability and high standard of research. Research topics should also be considered in the context of human rights history and norms as well as

current challenges associated with global phenomena. Respondents wanted to see multidisciplinary and diverse research projects covering a wide range of aspects. In addition to examining research topics in a critical light, the field should be open to self-criticism.

The independence, integrity and freedom of research emerged as important principles, particularly with respect to public and political decision making. According to researchers, fundamental and human rights research should highlight the contents and binding nature of the rights particularly because their original purpose is to serve as a yardstick of power and legitimacy. Respondents suggested that the aim should be to ensure that fundamental and human rights are mainstreamed and prioritized over other norms. At general level, experts also drew special attention to research on the actual implementation of human rights. They also hoped that researchers would aim for maximum social impact.

Experts highlighted a wide range of research needs. Many of these are already being explored but there is a need for additional research. This suggests that research in the field already covers relatively well the themes that were considered important in the future. Respondents highlighted, in particular, themes concerning current social challenges. They included social rights (e.g. in relation to the economic

crisis), rights in the context of the immigration and refugee crisis and rights relating to the online world, digitization and new technology. These phenomena were considered to cause problems in terms of fundamental and human rights in the future. Researchers should try to anticipate these problems and prepare for them by generating relevant scientific information and knowledge.

Experts expressed many views on how research could be developed with an active and long-term approach. It is noteworthy that many of the measures put forward by researchers concern the development of cooperation. Efforts to improve cooperation received strong support from the research field. The allocation of resources was also considered important for research. Research activities depend on financial resources, such as the core funding of universities and supplementary research funding, which lay the foundation for research and related activities, and research on fundamental and human rights is no exception in this respect.

Concrete proposals for resource-related measures included freezing the cuts in research funding, more efficient channeling of external financing to support fundamental and human rights, influencing funding systems and setting up foundations, research programmes and targeted calls to fund research on

fundamental and human rights. There were also calls for resources for launching a national doctoral programme. Moreover, it was proposed that funding opportunities should be utilized through multidisciplinary research cooperation.

The creation of systematic structures to support research was considered to foster research in many ways. Because financial resources are scarce, it should be carefully considered how research activities can be developed in the future. One of the solutions proposed to tackle this challenge was the creation of more efficient structures that would bring together researchers engaged in fundamental and human rights issues and make cooperation across disciplines more efficient. Concrete proposals included the creation of a national network of fundamental and human rights researchers. The activities proposed for this network included various events, such as national theme days on fundamental and human rights research, cooperation in postgraduate education, a mentoring programme, alumni activities and cooperation with people who work with fundamental and human rights issues. The network could also be used as a channel for disseminating scientific information by centralizing the dissemination of information and setting up various discussion and information exchange forums, multidisciplinary publishing

forums and databases with information on researchers and research.

Human rights education and training were also considered an important part of long-term efforts to promote research. Respondents hoped to see education and training to play a stronger role at all levels of education. They also wanted education and training to be provided to wide audiences in different languages, for example, on the internet.

One of the concrete measures proposed to promote research on fundamental and human rights was developing the related activities of the Human Rights Centre. Experts suggested that the HRC should have a clear role as a promoter of research and act as an additional source of resources and coordination support for those conducting research. They also hoped that the HRC would have resources for developing its own research activities. Researchers expressed strong support for the HRC's activities to promote human rights education and training.

Multidisciplinary cooperation clearly emerged as a cross-cutting theme in the survey. It was considered to be particularly important for promoting fundamental and human rights research in the future. According to assessments of the current state of research, multidisciplinary research on fundamental and human rights is

relatively rare considering how natural it would be because fundamental and human rights research is conducted in different disciplines. Cooperation between different fields was, in general, considered rather poor, and researchers were in favor of developing different forms of multidisciplinary cooperation. Multidisciplinary research was also mentioned as one of the principles and objectives that are important to research. It was considered to benefit all parties involved in research and to advance and improve researchers' thinking because it enables phenomena to be examined from different perspectives. This helps gain a deeper understanding of society and global phenomena that require multidisciplinary solutions.

Concrete measures to support multidisciplinary work include adopting a more positive attitude towards multidisciplinary approaches in the field, actively highlighting the benefits delivered by multidisciplinary research and using language that can be understood in different fields of study. Multidisciplinary networks and related events, funding applications, research groups, research projects and book projects play a key role in this respect. Moreover, respondents thought that human rights education and training should be provided across scientific disciplines, ensuring that education and training in themselves are multidisciplinary.

# Arctic melting: A new economic frontier and global geopolitics<sup>1</sup>

Kamrul Hossain\*

## INTRODUCTION

The Arctic region consists of both the terrestrial landmasses of the eight circumpolar states and the approximately 14 million square kilometer marine area of the Arctic Ocean. The vast landscape of the entire Arctic is the size of the African continent. Much of the region, particularly the marine area, is ice covered throughout most of the year. Ice never melts in the central Arctic Ocean, but during the summer months, many parts of the regional seas around the ocean open up to maritime access. The ice thickness throughout the Arctic Ocean, including the central ocean, however, is shrinking at an accelerating rate. Climate change is suggested to contribute to increasing global temperatures, and in the Arctic, temperatures are rising two to three times more quickly than the global average, resulting in much faster

melting of ice sheets. Ice melting, while creating challenges for the Arctic environment, also presents new opportunities as access to the Arctic Ocean gradually becomes feasible. The Arctic is known to be a resource-rich region with potential reserves of offshore oil and gas and other terrestrial mineral resources. Moreover, navigation through the newly emerging Arctic sea routes is gradually gaining in popularity despite the challenges to develop these routes as alternatives to traditional routes. Against this background, this brief paper emphasizes that despite challenges, particularly environmental and human security threats, emerging global geopolitical interests related to resource potential and maritime transportation of resources make the Arctic a focal point of global attention.

## THE ARCTIC: AN EMERGING ECONOMIC FRONTIER

The Arctic region is unique, regarded as the earth's final pristine ecosystem adapted to support its ecological service system. Today, however, dramatic changes threaten the maintenance of the Arctic's prevailing distinct environmental features. Climate change

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<sup>1</sup> This short article is produced based on the talk given by the author in the seminar entitled: *GEOPOLITICAL CHANGES: NEW GLOBAL POLITICAL AND ECONOMIC REALITIES*, organized jointly by the CEI - Centro de Estudios Internacionales (CEI International Affairs) and the Faculty of Law at the University of Barcelona on 11 May 2017 at Palau Macaya (Passeig Sant Joan, 108 - Barcelona). Author acknowledges the generous invitation extended by the organizers for this keynote speech.

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is a main point in the discussion on the Arctic, and the region suffers harsh consequences from climate change as increasing temperatures have detrimental effects on its natural environment. Drastic affects are expected on the Arctic's terrestrial and marine biodiversity and the cultural diversity of its population of distinct indigenous communities which rely on nature-based, traditional activities in the Arctic's natural environment. Arctic biodiversity includes numerous iconic, extreme-cold-adaptive and ice-dependent species, but many are expected to become extinct due to the transformations in the region. These changes threaten the balance of the ecosystem services and the stability of the ecological processes, which, in turn, have adverse consequences for the humans inhabiting the region. More than forty groups of indigenous peoples rely heavily on the Arctic's natural environment to perform the nature-based, livelihood activities on which their physical and cultural survival depends. Although these peoples have been highly adaptive to changes, today's transformations are so rapid that these peoples increasingly cannot become resilient or predict the course of changes, unlike in earlier times. These changes in their lives and livelihoods threaten their cultural identity.

The risks to the natural environment are also accelerated by other developments

resulting from increased human activities. However, some see these human activities as bringing new opportunities that make the region a geopolitical focus of both regional and global attention, primarily for its potential oil and gas resources. In May 2008, the United States Geological Survey (USGS) released findings on the potential oil and gas resources in the Arctic. According to USGS, the Arctic has one fourth of the world's undiscovered oil and gas resources, which are estimated to have approximately 90 billion barrels, or 13% of the world's reserves and 30% of recoverable gas reserves. Around 84% of these resources lie within around 500 meters underneath the Arctic Ocean and within the legal continental shelves of coastal states, or within 200 nautical miles of these countries.

Moreover, access to an ice-free Arctic Ocean that remains open longer permits more international navigation. Today, marine transportation through Arctic sea routes, particularly the Northern Sea Route (NSR) and the Northwestern Passage, is gradually being developed based on the following rationale. These sea routes are much shorter compared to traditional sea routes, allowing savings of time, money, and energy. For example, compared to traditional sea routes, the NSR cuts off 12–15 days' travel, and a voyage from China to Murmansk or Kirkenes saves up to

\$650,000 through lower energy consumption. In addition, these sea routes arguably are safer because the Arctic is a relatively conflict-free zone. Increased traffic on both sea routes has been documented recently. For example, the Northwestern Passage saw 7 ships in 2009 but 19 in 2013. Usage of the NSR has increased more remarkably: in 2010, only 4 ships passed through the route, but by 2013, the number increased to more than 70 ships. The number of vessels using the NSR dramatically declined in 2014 and 2015 but rose again in 2016. Cargo volume has steadily increased across recent years, rising by 33% in 2016.

#### GLOBAL GEOPOLITICAL INTERESTS IN THE ARCTIC

The region's resource potential, along with the increase in marine navigation through the new Arctic routes, has allowed a broad expansion of trade and investment that increasingly connects the Arctic with rest of the world, including the emerging economies of Asian nations. It is claimed that the Arctic is gradually becoming an important region, offering new economic frontiers for global actors and stakeholders. Access to ice-free Arctic Ocean, as discussed, not only leads to intensified extraction of its living and non-living resources but also offers maritime access for international navigation, which global actors see as

beneficial for increasing potential trade and investment in the region. Emerging Asian nations, including China, India, Japan, South Korea, and Singapore—which in 2013 became official observers to the Arctic Council, a high-level intergovernmental forum of the eight Arctic states—are exploring opportunities to build business relationships with the Arctic nations.

China—often labeled an energy-hungry nation—is on the frontlines of these developments. As its economy grows rapidly, China seeks to diversify its energy imports and sees Arctic resources, particularly Russian oil and gas resources, as potential targets to meet its growing energy demands. As bilateral relations with Russia improve, China is expected to double its oil imports from Russia by 2020 and has agreed to cooperate in building gas pipelines starting in 2018. China also meets its needs by investing in the energy sector elsewhere in the Arctic. For example, in 2013, China bought Nexen, a Canadian oil and gas company, for \$15 billion. Chinese investment in the Arctic countries extend to the development of other mineral and mining resources, particularly rare-earth elements, in which China has a 95% ownership share today. Five Chinese mining companies hold licenses to explore and develop rare earth elements in Greenland. It should be noted that China is considered to be the world



leader in refining rare earth elements. Moreover, China has established a free trade deal with Iceland, its first European partner in such an agreement. After the United States closed its Cold War era military base in Iceland in 2006, China expanded its presence in the region, making China the gateway to potential business investments in the Arctic.

China also increasingly uses the Arctic shipping routes and considers the implication of the use of the routes in its Belt and Road Initiative policy. It should be noted that China is among the most important nations in international maritime trade. Chinese ownership of vessels ranks fourth in the world, and the country carries 90% of its exports and imports through maritime transport. Moreover, Chinese ship owners control 8.91% of total world tonnage, making the country both the world's leading export nation and an important importer of goods and raw materials. The first Chinese cargo ship reached Europe via the NSR in the summer of 2013, and China tested its icebreaker *Xue Long* on the NSR in 2012. It is expected that by 2020, 5%-15% of China's trade with Europe will travel by the NSR.

In addition to China, other influential Asian nations, such as Japan, South Korea, and Singapore, are also considering the future potential of the Arctic. For example, Japan—the world's

largest importer of liquefied natural gas (LNG), second largest importer of coal, and third largest importer of oil—views the Arctic as an alternative source to meet its increasing energy demand. Japan has planned LNG shipments from Norway and Russia in 2018, explored the potential of the NSR to transport these resources, and invested in maritime capacity building by developing (or transferring) new technology. South Korea has a similar interest in energy resources and has invested in building ice-strength cargo ships capable of operating on the Arctic routes. Singapore has a great interest in offshore activities in the Arctic and is exploring the potential to use its lengthy maritime experiences to contribute knowledge and develop the shipping industry.

While these developments suggest increasing interest in the Arctic among global actors, the region's importance is also, to some extent, shaped by its role in the politics of the great powers, particularly China. The Arctic's rise as an influential global actor in economics and politics gives it a say in global politics. The US perceives a threat from China's development of closer relations between China and Russia, including transporting energy resources from the latter.

## CONCLUSION

Despite growing geopolitical and economic interest in the Arctic, development likely will be rather slow. The Arctic clearly is becoming an interesting geopolitical space, but the enthusiasm for the region arguably is overestimated. Take the example of hydrocarbon. Extraction of Arctic hydrocarbon resources, especially those offshore, does not seem feasible, creating no real need to rush for the resources. The unfavorable, harsh climatic conditions make extraction practically complicated and highly costly, and with the relatively stable market price of oil, extraction is not cost effective enough to compete with the existing market prices. Moreover, the companies that would be involved in extraction process are reluctant to invest due to the uncertainty and risks involved. Insurance companies are also often unwilling to provide coverage for businesses operating in uncertain conditions as exist in the Arctic.

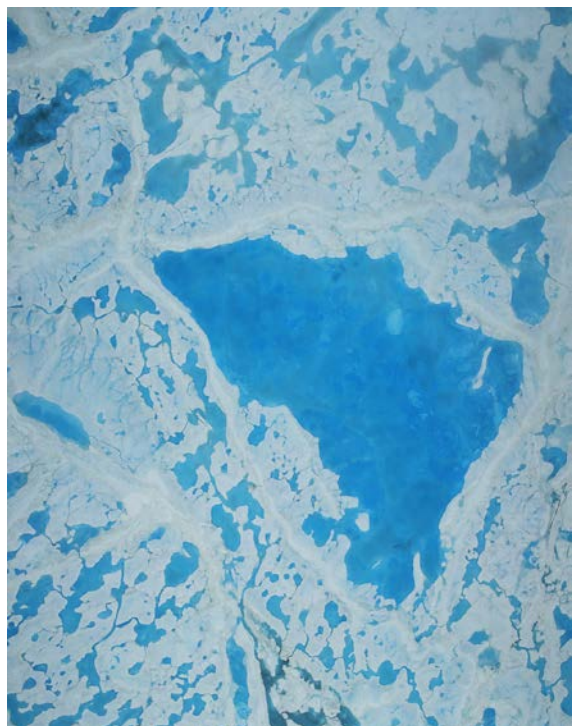
Like resource extraction, Arctic shipping is not smooth, and fully developing the shipping potential of these new sea routes requires time. The reasons for the slow development include the harsh, unpredictable climatic conditions, poor infrastructure, few to nonexistent port facilities, floating ice even when the routes are accessible, concerns about maritime safety and security, a shorter

navigation season, a lack of search-and-rescue facilities, insufficient navigation charts, and inadequate services for surveillance, pilotage and salvage. In addition, Arctic shipping requires ice-breaker services, making the journey expensive. The higher expenses for polar-class vessels to operate in Arctic waters and the reluctance of insurance companies to cover ships operating in this area hinder progress in developing these routes.

Given these real challenges, immediate and dramatic growth in resource extraction and shipping operations in the Arctic seems unlikely. Gradual development of services and new technologies is expected. For example, despite protests from environmentalists, Russia started extracting oil from the Prirazlomnoye field in the Pechora Sea in 2014, and it produced 10 million barrels of Russian North Arctic Oil by March 2016. Also, despite heavy criticism from environmentalists, Norway recently announced preliminary plans to open a record number of blocks in the Barents Sea for oil and gas exploration. More than half of the proposed blocks are in Norway's northernmost discovered oil field. Regarding maritime navigation, traffic is gradually increasing despite obstacles in the natural environment and the physical infrastructure. Russia established the NSR Administrative Office some years ago to administer the

route and offer relevant information to facilitate ship operations. Despite the overall weakness of the infrastructure, Russia built 10 emergency rescue centers along the NSR by 2015, offering port facilities and other services. Most centers, though, are positioned on the western leg of the sea route, leaving almost the entire eastern leg with few, if any, rescue facilities. Nevertheless, as suggested, this gradual development is slowly increasing the region's future importance as a frontier economy.

Any such developments taking place in the Arctic are not without costs, and the actors involved must be aware of the consequences. These developments, therefore, need to be assessed through legal and institutional tools implemented by actors from both the Arctic itself and across the globe. The existing regulatory tools applicable to the Arctic and its heavily institutionalized regional structure offer platforms for actors and stakeholders to balance satisfying geopolitical interests and safeguarding the Arctic's fragile environment. While the efforts undertaken primarily through the framework of the Arctic Council are laudable, how the nations and actors involved in Arctic geopolitics will behave and balance their economic interests with environmental protection obligations remains to be seen.



# Recent developments in regard to the legal status of Sámi in Finland

*Juha Joona\**

## 1. The Reform of the Act on Sámi Parliament

In Finland, the legal status of the indigenous Sámi is governed by the Act on the Sámi Parliament. The Act contains a definition of who is considered as a Sámi person in Finland. The Sámi referred in the Sámi Act have the right to vote in the Sámi Parliamentary Elections in which Sámi Parliament is elected. The Sámi Parliament officially represents the Sámi people in Finland.

In the autumn of 2017, the Ministry of Justice appointed a committee to prepare the renewal of the Act on Sámi Parliament. The committee is chaired by the former President of the Supreme Administrative Court Pekka Hallberg. The starting point for this preparatory work is the Constitution and the international human right conventions binding on Finland. In addition, the initialized Nordic Sámi Convention and

the ILO-169 Convention, concerning the rights of indigenous peoples, which Finland has not ratified, will also be taken into account.

There are several controversial issues in the renewal process of the Sámi Parliament Act. The current law contains two Sámi definitions. On the other hand, a Sami is a person who himself, or one of his parents or grandparents have learned the Sámi language as their first language, and the descendants of such a person. The basis for the current electoral roll is an interview study made in the area of four northernmost municipalities of Finnish Lapland (Enontekiö, Inari, Utsjoki and Sodankylä) in the 1960s. In this survey a person was considered a Sámi in accordance with the above-mentioned criterion. Those - about 10,000 persons - who have today right to vote in the Sami Parliament elections, are mainly descendants of these interviewed persons.

The second Sámi definition came into the legislation in 1995 when the Sámi Act was enacted. In accordance with this definition, a Sámi is also a person if he considers himself as Sami and he is a descendent of a person who has been registered into a land, taxation or population register as a mountain, fishing or forest Lapp. The registers

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were held in Northern Finland in the 1600-1800s. This so-called Lapp definition has considered controversial over the years. Most of the elected members of the current Sámi Parliament would like to remove the Lapp definition. Minority would like to keep it.

Although the Lapp definition has been in the law more than 20 years, nearly all applications made on this basis, have been rejected. However, in 2011, the Sámi Parliament approved 11 applicants on the grounds that the ancestor of the applicants was marked into the above mentioned register in 1739.

The arguments in favor of removing the Lapp definition from the Act is justified by the reason that the ancestor of a person has been marked as Lapp too far in the past. The arguments in favor of preserving the definition refer to the fact that language criteria is not fair because many Sámi have lost their language as a result of church and state measures earlier in the history. In addition, they claim that a person must be able to show that he/she descends of the indigenous people of the region which, in fact, the earlier in the text mentioned records show. The controversial definition is one of the issues the Commission has to decide.

Another issue that will be dealt in the Committee is the quota system of the

Sámi parliamentary elections. In the Act of Sami Parliament it is stated that Sámi homeland means the municipalities of Enontekiö, Inari and Utsjoki, as well as the area of the reindeer owner's co-operation of Lapland in Sodankylä. This geographic definition is not based on any property law or legal-historical determination, but based on the earlier mentioned study, conducted in the 1960s. The coverage of the Sámi homeland region is based on the fact, that most of the people who fulfilled the required (language) criterion, lived in the region at that time.

According to the Sámi Parliament Act there shall be at least three members elected from each of the municipalities located in the Sámi homeland. This is seen as a problem in terms of equality. For example, in the elections of 2011, only 124 person were entitled to vote in Sodankylä. Nevertheless, the law required that three representatives of altogether from 21 shall be elected from Sodankylä.

On the other hand, it seems that the voters' residence do not have very strong influence on results of the election. Today about two-thirds (65%) of the Sámi live outside the Sámi homeland area, mainly in southern cities of Finland.

However, for example, in the Sámi elections of 2015, 19 Sámi Parliament members were elected from the Sámi

homeland and only two outside of this area.

The renewal of the Sámi Parliament Act has also been dealt earlier. A working group report on this was completed in 2013. In this report it was suggested that criminal liability shall also be aimed on staff and representatives of the Sámi Parliament. In addition, it was proposed, that public authorities' obligation to negotiate with the Sámi Parliament shall be extended. The current Committee which was appointed in 2017, will also take a position on these issues.

## **2. The ILO Convention No.169 and the Nordic Sámi Convention**

In 2014, the Finnish Government submitted a proposal to the Parliament to ratify the Convention concerning Indigenous and Tribal Peoples in Independent Countries (ILO-169), but Parliament did not ratify the agreement. However, because it is a question of an international treaty, in accordance with Finnish legislation the ratification is still pending in Parliament. However, the current government has not presented ratification of the agreement.

The Nordic Sami Convention initialed at the beginning of 2017. Promulgation of the Convention requires that the Parliaments of Finland, Sweden and Norway and the Sámi Parliaments approve intent of the Convention. The

Sámi Parliament of Finland has not so far taken a definitive position on the Convention.

## **3. Reindeer herding – Current Challenges**

The Finnish reindeer herding area comprises about one-third of Finland's surface area. In this area reindeer herding can be practiced, regardless of who owns the land. In Sweden and Norway main rule is that reindeer herding right belongs only for reindeer herding Sami i.e. persons who are Sami extraction and their parents or their grandparents have or have had reindeer herding as their primary occupation. In Finland in principle every person living in the reindeer herding area has right to practice reindeer herding.

When talking about Sámi reindeer herders in Finland, this means those persons who are marked into the Sámi Parliamentary electoral roll and who is engaged in reindeer husbandry. There is no accurate information on how many Sámi get their main livelihood for reindeer husbandry. However, it is estimated that such persons would be between 2-4 % of those who are marked into the register. The number of part-time Sami reindeer herders is considerably higher. Almost all reindeer herders listed on the Sámi electoral roll practice reindeer herding in the north of the reindeer herding area.



The reindeer herding area is divided into the areas of 54 reindeer herding co-operation. The Ministry of Agriculture and Forestry decides for every 10 years the maximum number of reindeers in a co-operation's area. Next time, the allowed number will be set in year 2020. The key criterion to a decision in wideness and condition of winter pasture areas located in a co-operation's area. Especially in the northern part of the reindeer herding area the pastures are quite worn out and the number of lichen has decreased. Pasture surveys are in progress and it is possible that maximum allowed number of reindeer in the areas of some northernmost co-operations will be decreased.

Another topical issue concerning reindeer herding is the damages caused by the predators. The biggest damages for reindeer herding are caused by the wolverine. In 2017 it was announced 3 000 wolverine-killed reindeer. Damages caused by wolverine are about 6.6 million euro/year, which is more than the total amount of damages caused by wolves, bears and lynx. Especially in the eastern and northern parts of the reindeer herding area, wolverine causes large damages.

It has been estimated, that in Finland lives approximately 220-250 wolverines. Until year 2016 the wolverine was completely protected. In 2017, the Ministry of Agriculture and Forestry

gave permission to hunt eight wolverines and this is also the case this year. It is probable that some of these licenses will be given to the areas of "Finnish arm" (Käsivarsi and Näkkälä co-operations) where the wolverine has caused large damages to the reindeer herding.

Regarding wolverine-caused damages, it has suggested, that also in Finland there should be a territorial-based compensation system. Against this it has said, that this system would be relatively expensive and it do not reduce the number of the damages. Reindeer owners' opinion have also mainly been against this kind of system.

It has also proposed that individual animals should be transferred outside the reindeer herding area. However, the authorities are holding that this is possible only if the attitudes of the local population towards this kind of project are sufficiently positive. So far no wolverine have been moved outside the reindeer herding area.





# Microplastics and the Entry into Force of the Ballast Water Convention: An Arctic Perspective

*Stefan Kirchner\**

On 8 September 2017, the International Convention for the Control and Management of Ships' Ballast Water and Sediments<sup>1</sup> (BWM Convention), which was adopted in 2004, entered into force. The idea behind this international treaty is to reduce the transfer of invasive species by regulating the removal of ballast water by ships. Ships require ballast water in order to balance the vessel. Based on the amount of cargo carried at any given time the amount of ballast water varies. This means that ballast water might be taken in at one port and might be released in halfway around the world. In this way, invasive species, including pathogens, have been

introduced in many places. This in turn can have serious consequences for the local environment as well as for the local economy and for public health. In addition to the transfer of biota, recent research shows that the release of ballast water is also to blame for the transfer of microplastics.<sup>2</sup>

The BWM Convention was created in 2004 in order to protect the marine environment and coastal states. As is common when regulating shipping, including international marine environmental law, the obligations established in this international treaty are linked to the flag state. The obligation to comply with the standards set in the BWM Convention arises when a ship flies the flag of a state which has ratified the treaty. As of 9 October 2017,<sup>3</sup> the BWM Convention has been ratified by Norway, Finland, Denmark, Russia and Canada but not yet by the United States, nor by Iceland. The requirements for the entry into force of many shipping related international treaties include not only a minimum number of ratifications

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<sup>1</sup> The full text of the convention is available online at [http://www.bsh.de/de/Meeresdaten/Umweltschutz/Ballastwasser/Konvention\\_en.pdf](http://www.bsh.de/de/Meeresdaten/Umweltschutz/Ballastwasser/Konvention_en.pdf).

<sup>2</sup> M. Matiddi, A. Tornambè, C. Silvestri, A.M. Cicero, E. Magaletti, "First Evidence of Microplastics in the Ballast Water of Commercial Ships", in: Juan Baztan, Bethany Jorgensen, Sabine Pahl, Richard C. Thompson and Jean-Paul Vanderlinden (eds.), *MICRO 2016. Fate and Impact of Microplastics in Marine Ecosystems - From the Coastline to the Open Sea*, 1st ed., Elsevier, Amsterdam (2017), pp. 136-137, <https://doi.org/10.1016/B978-0-12-812271-6.00133-2>.

<sup>3</sup> For a the regularly updated summary of the ratifications of different international treaties under the auspices of the International Maritime Organization (IMO) see <http://www.imo.org/en/About/Conventions/StatusOfConventions/Documents/status-x.xls>.

(here: 30) but also that the ratifying states, as flag states, cover a significant (in the case of the BWM Convention: 35 %) part of the global tonnage. In this way it is ensured that international treaties which are created under the auspices of the International Maritime Organization (IMO) actually have a practical impact on the practice of international shipping. Since the entry into force of the BWM Convention, ballast water exchanges may only take place offshore and no longer in ports. Under Regulation D-2 of the Annex to the BWM Convention, newly built vessels require ballast water treatment technologies which conform to specific rules as to which biological components, including harmful microbes. Immediate compliance with Regulation D-2 might not be the law yet for old vessels, but it is definitively a good idea: not only would doing so contribute to meeting the goals of the convention more quickly, states parties to the BWM Convention might find themselves bound to an accelerated schedule as soon as October 2019: The IMO's Marine Environment Protection Committee (MEPC) will meet in April 2018 to discuss the adoption of changes to the BWM Convention, drafts of which are currently circulated among member states.<sup>4</sup> Currently, the MEPC is scheduled to revise the experience with implementing the convention in 2022.<sup>5</sup>

Every vessel flying the flag of a state which has ratified the BWM Convention has to have a ballast water record book, detailing all intakes, treatments and discharges of ballast water, a ballast water management plan as well as (for vessels with a gross tonnage of 400 or more, which covers the vast majority of commercial vessels, just for a sense of reference: large cruise or cargo vessels have a gross tonnage in excess of 200,000) an International Ballast Water Management Certificate issued by the flag state.

The Ballast Water Management Certificate provides coastal states with written documentation concerning the ballast water management standards used by the vessel. Like other certificates issued by flag state authorities, the certificate has to be renewed on a regular basis and the presence of this certificate can be checked by the port state authorities. In so far as the BWM Convention is similar to the Bunker Oil Convention or the Civil Liability Convention, which require vessels to have on board documents issued by the flag state which certify that insurance has been taken out to provide third parties against damages from oil spills. In the case of the BWM Convention, the competence of the port state authorities goes farer than that because the port

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<sup>4</sup> IMO, Implementing the Ballast Water Management Convention, <<http://www.imo.org/en/MediaCentre/HotTopics/Pages/Implementing-the-BWM-Convention.aspx>>.

<sup>5</sup> Ibid.

state authorities may also check the ballast water record book and may even take samples from the vessel's ballast water.

For the European Arctic, the entry into force of the BWM Convention means more protection for the near coastal environments. Given the rising importance of ports like Helsinki for cruise shipping, this is no small issue. When it comes to the regulation of international shipping, at least without the contribution of the United States, the Arctic region will usually be too small, both in the number of states and in the total gross tonnage of vessels flying the flags of Arctic states, in order to drive similar endeavors in the future. It is therefore imperative for Arctic states which are interested in preserving the natural environment to make use of existing legal mechanisms. This includes the IMO. Within existing frameworks, concerted efforts by Arctic states can be heard. This is even more the case when taking into account existing political differences in other fields. The long-standing history of cooperation in the

Arctic can be used as a driving force for future legislative developments.

This can include the expansion of the material scope of the BWM Convention to include effective measures against the transfer of microplastics through ballast water. In this context more urgent action might be necessary, first from a practical perspective but possibly also in regulatory terms. More research is necessary in order to find out which technical and / or legal measures would be necessary to prevent or at least limit the spread of microplastics through Ballast Water.

Plastic waste is already a major problem in the Arctic Ocean, <sup>6</sup> indeed, microplastics are already found in the Antarctic Ocean as well). <sup>7</sup> The man-made pollution of the ocean with microplastics has reached dangerous levels. Microplastics are entering the food chain through sea food. <sup>8</sup> Today, humans eat plastic which has been eaten by fish after having been thrown away by humans. Clean oceans are not only a sustainable development goal (Sustainable Development Goal 14: Life

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<sup>6</sup> A. Cózar, E. Martí, C. M. Duarte, J. García-de-Lomas, E. van Sebille, T. J. Ballatore, V. M. Eguíluz, J. Ignacio González-Gordillo, M. L. Pedrotti, F. Echevarría, R. Troublè, X. Irigoien, "The Arctic Ocean as a dead end for floating plastics in the North Atlantic branch of the Thermohaline Circulation", in: 3:4 *Science Advances* (2017), <<http://advances.sciencemag.org/content/3/4/e1600582>>.

<sup>7</sup> Catherine L. Waller; Huw J. Griffiths, Claire M. Waluda, Sally E. Thorpe, Iván Loaiza, Bernabé Moreno, Cesar O. Pacherres, Kevin A. Hughes, "Microplastics in the Antarctic marine system: An emerging area of research", in: 598 *Science of the Total Environment* (2017), pp. 220-227.

<sup>8</sup> See Nate Seltenrich, "New Link in the Food Chain? Marine Plastic Pollution and Seafood Safety", in: 123:2 *Environmental Health Perspectives*, pp. A34-A41, <<https://ehp.niehs.nih.gov/wp-content/uploads/123/2/ehp.123-A34.alt.pdf>>.

under Water), they are essential for human life. While several attempts are already underway to deal with the issue, no comprehensive solution has been found. Amending the BWM Convention will not solve the problem completely because the largest part of microplastic pollution is land-based rather than ship-based but it could make a contribute and lead to more technical research which could be used in other contexts as well. Across political divides, the Arctic states have an opportunity to become trailblazers in efforts to rid the oceans of microplastics.



# Digital architecture as a roadmap for food business operators in Finnish Lapland

*Anna-Riikka Lavia\** and *Dele Raheem\*\**

## 1. Background information

The unique arctic circumstances, light summers and pureness of the air add a great value to the food produced in Lapland. There is a strong pressure to support and develop food business in Lapland at many levels. In order to realize this, one goal will be to improve self-sufficiency towards food sovereignty in the Lapland area. This task will not be possible without developing the whole food chain.

The Finnish Lapland's food program was launched on 19th May, 2017 at the Multidimensional Tourism Institute, Rovaniemi. The launch was preceded by four workshops from 10th November 2016 to 8th May, 2017. The vision set forward by the program is scheduled to take effect from 2025, there will be interactive and collaborative possibilities to realize the vision of the program. The research aspect will involve the Natural Resources Institute

Finland (LUKE), University of Helsinki, and the Arctic Centre / University of Lapland.

The program main area of interest are on the food products that are produced in the Lapland region and how they can be processed within the region through value addition that will create jobs for the local inhabitants. The food products are divided into several sections: Milk and dairy products, Meat and meat products (reindeer, beef, sheep), Vegetables (potatoes, onions) Outdoor garden vegetables (carrots, turnips, cabbage), Natural and herb products. Other important features of the program are the "Food Club concept" where processing, storage, logistics and sales of these products can interact under one umbrella and the use of digital technology as a tool that will improve e-business and take advantage of the social media.

Full details of the program (in Finnish) available at: <https://issuu.com/lapinliitto/docs/elintarvikeohjelmaa4>

The project "Digital architecture as a roadmap for food business operators in Lapland or "Digiarkkitehtuurin tiekartta lappilaisille elintarvikeyrityksille" in Finnish, draws a roadmap of digitalization for food businesses in Finnish Lapland. The main goal of the

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project is to spread the knowledge or abilities acquired from adapting digitalization and utilizing the benefits of digital solutions in small and medium sized businesses. It also helps entrepreneurs to face the challenges of digitalization. Traditional and cultural features of the Arctic are seen to create a benefit in the food business. In addition, the customer-oriented approach will be an essential feature of the project. The project will deliver the knowledge by producing material and arranging workshops where experts and entrepreneurs can meet and discuss the challenges and possibilities of digitalization.

## 2. Work packages

In response to questions on how disruptive and emerging technology will decide how the food industry interacts with consumers, and whether traditional food processors are prepared for this shift in opportunity. It will be important to harness the digital age, encompass e-commerce, and other emerging trends that has the capacity to favor small and medium based food business operators and reach new audiences.

Digitalization – the use of information technology and digital solutions is spreading in different parts of the society. It offers even small companies solutions that help to develop their

business and make every day routine easier. In the Finnish Lapland food industry, digitalization is not yet fully adapted at every possible level. In particular, small and medium sized companies still have work to do and catch up with the latest trends. In the digital architecture as a roadmap – project, food business entrepreneurs will learn more about digitalization as a tool and its benefits.

The project is funded for 24 months by The European Rural Development Programme for Mainland Finland and granted by the ‘Center for Economic Development, Transport and the Environment of Lapland’ (ELY-keskus). The Northern Institute of Environmental and Minority Law at the Arctic Centre, University of Lapland is the main partner and executor of the project. Other participating partners are: The Natural Resources Institute Finland (LUKE) and Lapland University of Applied Sciences (Lapin AMK). In addition, the Faculty of Art and Design at the University of Lapland is participating. The project will benefit from the expertise delivered by the project partners and will start in January 2018.

The project aims to improve competitiveness and offer networking opportunities to small and medium sized businesses through digitalization. The appropriate digital solutions and

benefits of digitalization are produced and offered to food business entrepreneurs. The roadmap of digitalization is based on the diverse expertise of collaborating partners and it is co-created in collaboration with the entrepreneurs.

The main goal of the project is to help entrepreneurs to realize the possibilities of digitalization and encourage them to take advantage of existing digital solutions. Project will also activate the entrepreneurs to think of what could be the best way to benefit from digitalization in their own business in the future. During the project, the food business operators will start using digital solutions and new networks will be developed. The project is supporting small and medium sized businesses by increasing the knowledge of digitalization. It helps them to develop their businesses in a more up-to-date way without losing their traditional and cultural ways.

There will be four work packages in the project. The first work package (WP1) is about making existing digital solutions more familiar for entrepreneurs and making them to plan the digitalization process in their own business. The second work package (WP2) deals with the added value of tradition and locality in food production in Lapland, also from a customer-oriented approach. The third work package (WP3) will focus on cyber-

security issues that are related to digitalization. The fourth and final work package (WP4) binds together the whole activities in the project.

The fourth and final package is about producing the material that assembles the knowledge about digitalization in a clear format for small and medium food business operators. Each work package will be carried out by experts and there will be interacting possibilities in the activities of the work packages. The work packages will include workshops and production of relevant materials. The information gathered during the project will also be disseminated through the social media. This roadmap will be built with materials that are produced during the project including video clips, publications, reports etc. The outcome will be a digital material on digitalization meant for small and medium sized food businesses in Lapland – the digital architecture as a roadmap.

### 3. Benchmarking visits

Switzerland:

The 'digitalswitzerland' based in Zurich is constantly bringing digital transformation to small and medium enterprises in different fields including the food sector. This is carried out through the "Swisscom Digital Business and the "Venture Kick Accelerator"



initiatives. They help small companies to master the digital innovation ecosystem with coaching, advice and making connections both nationally and internationally.

Germany:

A visit to organizations in Berlin that are relevant to the food enterprises in Lapland.

- a) The Berlin Center for Digital Transformation creates a platform that supports both small and middle sized companies and start-ups as well as large companies in their digital transformation. The focus is on key and cross-sectional technologies for applications in healthcare, medicine, industry and production as well as critical infrastructures.
- b) The possibility of introducing the 'Kochhaus concept' in Lapland. This is in relation to the popularity of organic foods globally and will help to display the Lapland food ingredients in grocery stores for locals and tourists.
- c) Analyze and Realize (A & R) for innovation and clinical research on new products and how to go through the EVIRA / the

European Food Safety Authority (EFSA) rules in order to market the product. The company for more than 20 years have supported large, medium, and small companies in the food and drug industries both nationally and internationally.

#### 4. Societal impacts

The societal impacts at the end of the project will help small and medium sized businesses to recognize the possibilities and challenges of digitalization. It will also activate entrepreneurs to take part in new kinds of networks. The project will increase the knowledge available to entrepreneurs on the opportunities that can be gained to add value to their business. During the project, entrepreneurs start to adopt digital solutions safely and become more motivated of being part of the development and trends of digitalization in the Lapland region. The roadmap produced in the project will be freely available for use by everyone interested.

The business of customers is constantly being impacted by the internet. By being able to tap into cloud based technology to provide quality management for food manufacturers will be an added value in Finnish Lapland food businesses. The application of digitalization in food is expected to enhance information on the

products for the consumers. Because of this, end customers are increasingly able to tell their manufacturers directly - via the internet - exactly what they want and when they want it.



# Participatory models to ensure the full protection of indigenous peoples' fundamental rights in the Arctic

*Margherita Paola Poto\**

The survival of indigenous peoples in the Arctic region depends on hunting for mammals, herding reindeer, fishing and gathering, not only for food to support their local economy, but also as the foundation for their identity. Serious challenges are posed to human health and food security by the drastic change in species and traditional food habits due to environmental threats.

The adoption of community-based approaches where the land and coastal activities are harmoniously preserved and managed by governmental agencies, local communities and indigenous groups, works as a precondition to the enjoyment of internationally-protected fundamental

rights, such as the right to health, to food, to culture and to a safe environment.

A study conducted by the International Union on the Conservation of Nature (IUCN)<sup>1</sup> on the connection of protected areas and indigenous peoples identifies two main tools that can be used in this regard: the concept of co-managed protect area and the community-conserved area<sup>2</sup>. According to this study, a co-managed protected area is a government-established sphere where decision-making power, responsibility and accountability are shared between governmental agencies and other stakeholders, in particular the indigenous peoples and local and mobile communities that depend on that area culturally and/or for their livelihoods. The concept of community conserved area includes the protection of significant biodiversity, ecological services and cultural values, voluntarily conserved by indigenous peoples and local and mobile communities through customary laws or other effective means. The process of establishing co-managed protected or community conserved areas is quite complex and it engages all levels

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<sup>1</sup> See the official website <https://www.iucn.org/>, visited in November 2017.

<sup>2</sup> Grazia Borrini-Feyerabend, Ashish Kothari and Gonzalo Oviedo with inputs from Marco Bassi, Peter Bille Larsen, Maurizio Farhan Ferrari, Diane Pansky and Neema Pathak Adrian Phil lips, Series Editor, Indigenous and Local Communities and Protected Areas Towards Equity and Enhanced Conservation Guidance on policy and practice for Co-managed Protected Areas and Community Conserved Areas, Cardiff University, Best Practice Protected Area Guidelines Series No. 11 IUCN – The World Conservation Union 2004.

of decision-makers, from governmental to local agencies and communities, and it includes all the relevant stakeholders. To understand the key-role played by them, and their effective impact on the final decision, it is noteworthy saying that the process is grounded on an agreement, which includes a management plan and its complementary initiatives, by-laws, incentives and compensations. The central aspect in this regard is that all the relevant stakeholders are to be engaged in the pre-agreement phase.

The IUCN guidelines identify a set of criteria that help distinguish among primary and other stakeholders, and namely: 1. On an existing legal or customary right that gives legitimization to the participation; 2. On a continuous relationship with the land and the resources; 3. On a direct dependency on the resources for subsistence and survival; 4. On cultural and historical relations with the land; 5. on traditional ecological knowledge on that land; 6. On potential losses and damages in the management process; 7. On a compatibility of interests between the stakeholders' and the international and national conventions'<sup>3</sup>. Many are the examples listed in the study that show how the concept of "land" does not exclude the possibility of establishing co-managed protected areas that cover both

the territory and the coastal waters, to the extent of including co-management also for marine protected areas.

Probably the most vivid example of co-managed area that was actually initiated by an aboriginal community is the case of the Gwaii Haanas National Park Reserve, National Marine Conservation Area Reserve, and Haida Heritage Site (Queen Charlotte Islands off the coast of British Columbia), established in 1986 under an agreement between Parks Canada and the Council of the Haida Nation. The initiative of creating such an area came from the Haida Nation itself and it resulted in a successful co-management plan where both the Haida representatives and the Canada Park representatives had worked by consensus in protecting the natural resources and their traditional use. The case of the Haida is of particular interest for the purpose of this article, because of the Haida's deep connection and dependence on the territorial and marine resources: the Haida nation is used to practice fishing, hunting and trapping, depending on the seasonal availability it also depends on nature for medicine purposes and for the expressing its cultural identity.

In the process of establishing the protected area, the parties had been consulted and their opinions had been

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<sup>3</sup> Ibidem, p. 33.

considered for five years before the agreement's conclusion. The result was extremely positive, with a remarkable shift in the local economy and an increase in the tourism sector, as well as in the labor market (more than 50% of the park staff belongs to the Haida nations). The study identifies the remaining challenge in the acknowledgement of the participatory rights of the Haida in the management of the boundary waters of the Gwaii Haanas, on the ground of their belief that land and sea are not separated and therefore the fishing rights on that area shall not be restricted by some federal legislation claiming that there are different levels of protection of the area and that the activities on the land and on the sea shall be therefore regulated in a separate way.

Such final statement can be extremely instructive when considering to use the best practice as a model for the coastal Sámi of Norway, as well. Two short comments on the need to comprise the protection of the indigenous tradition within a holistic approach, including all the natural resources that are source of sustenance for the Sámi.

First, the combination of different activities to grant a way of living

sustainable and resilient to changes, has been encouraged since the approval of the Land Acquisition Decree in 1775, where the indigenous population of Finnmark were suggested to unite farming and fishing, as much as the land will allow it<sup>4</sup>. Second, it has been shown in several studies that originally there was no distinction between land and sea-related activities and the Sámi groups dedicated their time and energy to both, depending on the availability of the resources. In particular, Angelika Lätsch recalls that "the coastal Sámi in lived mostly in the inner parts of the fjords while the outer areas were later settled by Norwegians" and "they traditionally earned their livings from a mixed subsistence economy based primarily on fishing, hunting and animal husbandry which is generally described as fiskarbonden" (fishermen-farmer)<sup>5</sup>.

Certainly, the establishment of a co-managed protected area where the land and coastal activities could be indifferently protected and preserved both by governmental agencies, local communities and indigenous groups could be of great benefit for the protection of the coastal Sámi.

The urge to act is not only dictated by a general preoccupation to comply with international legal provisions, but it

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<sup>4</sup> See Steinar Pedersen, cit., p. 70-71.

<sup>5</sup> Angelika Lätsch, Coastal Sámi revitalization and rights claims in Finnmark (North Norway) – two aspects of one issue? Preliminary observations from the field, Senter for Sámmiske studier, Skriftserie nr. 18, 2012.

deeply depends also on the intimate bond that the local peoples have with the land and coasts they inhabit and by the threats that climate change posed to their survival, both from the food security and the environmental protection perspective.

The need to adopt a comprehensive approach in regulating protected areas becomes extremely topical in Northern Norway, where indigenous groups are devoted to different activities, such as hunting, farming and fishing and because of such connection with the land they live in, their right to participate to decisions is to be granted to its full extent, with no geographical limitations or sectoral distinctions.

The Finnmark Act marked a major milestone in engaging the Sámi peoples in the decisions regarding the county of Finnmark.

Despite such a remarkable example, the effective progress to the acknowledgment of their participation in co-managing marine protected areas is still in the making and there seems to be some reluctances to fully recognize the coastal Sámi fishing rights.

The last Report on Coastal Sámi's rights on sea fishing (Sjøsamenes rett til sjøfiske) released by the Norges nasjonale institusjon for menneskerettigheter (Norwegian National Human Rights Institution, NHRI) in 2016<sup>6</sup> concludes in the same way, by reporting the voice of the Sámi, lamenting the scarce attention given to their voice in the decisions that involve the natural resources they deeply rely upon.

In particular, it recalls the wording of the Sámi Committee II NOU 2007: 13: "[...] the use of the marine areas must be seen in context. Activities that may affect fishing in sea-Sámi fjords and coastal waters, such as aquaculture, and entry and operation of fixed installations such as sea powerplants, shipment terminals and landfills, are to be planned and operated in such a way that they do not threaten fish stocks or biodiversity. In order to realize this, it will be important for both the Sámi Parliament and others Sámi and local fishing interests are given a role in the current decision-making processes"<sup>7</sup>. A prerequisite for meaningful consultations may consist in regulating the investigations prior to the interventions on the interested area. Additionally and fundamentally, the coastal Sámi shall be granted an effective

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<sup>6</sup> Temarapport 2016, Sjøsamenes rett til sjøfiske, Norges nasjonale institusjon for menneskerettigheter, available at <http://www.nhri.no/getfile.php/131698/nim/Nyhet/Temarapport%202016%20-%20Sj%C3%B8samenes%20rett%20til%20sj%C3%B8fiske%281%29.pdf>, visited in August 2017.

<sup>7</sup> NOU 2007:13 B Den nye sameretten; Utredning fra Samerettsutvalget Del III – kapittel 16-24 punkt 22.5.5.2. Translation of the author.



right to participate to the decisions that regard them and their cultural identity. The vulnerability of all the actions undertaken so far lies in the scarce level of participation of the local peoples as well as by the lack of a political will to effectively decentralise the decisions that are connected to the management of marine protected areas. Potentially fruitful research lines will have to focus on a systematic mapping of the virtuous co-management regimes<sup>8</sup>, where the participation of all the stakeholders is effective and the dialogue with the indigenous peoples and their local knowledge is lively and open. Such an approach will be likely to lead to a meaningful use of comparative data that could offer effective implementing solutions to the co-managed model of marine protected areas.



<sup>8</sup> On this line, see the example of the marine spatial planning in Scotland as illustrated by Glen Smith and Svein Jentoft, *Marine spatial planning in Scotland. Levelling the playing field?*, in *Marine Policy*, 84, 2017, 33-41.

# Human and societal security implications in the Arctic

Anna Petrétei\*

The field of security studies developed alongside the Cold War, and traditionally focused on military threats to the survival of states. However, since the end of the Cold War the concept of security has widened. Security concept today relates to a context specific understanding, framing the concept necessarily a contested one with many meanings. Security nowadays does not only refer to threats to states' survival; this new comprehensive approach addressing multiple threats and vulnerabilities also promotes the well-being of human individuals or communities. Versatile challenges facing communities at various levels are considered to result from environmental, economic, and societal changes rather than from military threats. The developing concept of security and the importance of the topic was also recognized by the Academy of Finland, when it granted funding for the research project entitled *Human Security as a promotional tool for societal security in*

*the Arctic: Addressing Multiple Vulnerability to its Population with Specific Reference to the Barents Region* (HuSArctic). HuSArctic is a four-year project (January 2015 – December 2018), involving numerous scholars with special expertise on Arctic issues.

The main objective of the project has been to address human challenges of the Arctic population from the human security perspective, to present a comparative and interdisciplinary perspective on the Arctic, and to address a comprehensive understanding of security in the Arctic with particular focus on the Barents region. Despite the growing general interest towards human security issues and the recognition of the importance thereof, no extensive research had been conducted focusing on the human security framework within the peculiar Arctic context. HuSArctic has been striving to fill this gap by specifically taking into consideration the unique features of the region.

Our project team has been actively participating in international seminars and conferences in order to disseminate knowledge and share research outcomes with other experts on Arctic issues. HuSArctic has organized two major

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events: the kick-off conference (organized in the Arctic Centre of the University of Lapland, Rovaniemi, Finland) and the mid-term conference (organized in Rovaniemi and Hetta, Finland and Kautokeino, Norway) have brought together over 50 international scholars and experts. Additionally, HuSArctic has hosted several seminars and guest lectures, and co-organized various other events. We have endeavored to actively engage relevant stakeholders by inviting them to our seminars, and by organizing a stakeholder coffee chat where stakeholders could present and discuss about the most pressing security challenges from their own perspective.

Based on the above events, we have produced several reports, popular articles, blog posts and newsletters to further disseminate our findings. Our research results have also been published in numerous peer-reviewed scientific articles and edited book volumes.<sup>1</sup> Furthermore, HuSArctic has endeavored to inspire young researchers and students as well: two masters' theses have been completed within the frameworks of the project.

Being in the final year of HuSArctic, the project team is looking forward to organize the HuSArctic final conference in Helsinki during the fall. In the course

of the final conference, we will summarize the findings of our research and give further recommendations on the promotion of human and societal security in the Arctic.



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<sup>1</sup> Further information may be found on the HuSArctic website: <http://www.husarctic.org/en/home>.

# 2017 International Conference on Policy towards Indigenous Peoples: Lessons to be Learned and corresponding Indigenous Workshop/Art Exhibition in Sapporo Japan

*Hiroshi Maruyama\**

Deep in me there exists a landscape,  
which in my youth became suppressed.  
Important memories, the connection to  
my ancestors,  
and deeply personal relations –  
like the lullaby of my grandmother  
Lovisa, and my native language –  
all of this was extinguished.  
Time took away the sense of presence  
and existence.  
My longing for origin has pushed me out  
into the wild and pristine Nature;  
only there I could feel the connection  
that links Time to my life.  
There, a new insight arises.  
The traces lead to other paths, further  
and further into the mind.

Within the womb of Nature's raw and  
continuous transformation,  
connections to the past and the future  
are born –  
my inner chains are brought into the  
light to finally dissolve.  
- Louise Fontain

Approximately 100  
researchers/artists/activists gathered in  
Sapporo from 30 November to 4  
December from all over the world. Their  
purpose was to participate in the  
International Conference on Policy  
towards Indigenous Peoples: Lessons to  
be Learned and corresponding  
Indigenous Workshop/Art Exhibition.  
At least in Japan, there had never been  
such an art and academic event of  
international standing before. In this  
essay, I describe why the event was  
planned, how it was prepared, and how  
it turned out to be. Additionally, I will  
omit honorific titles in the text.

## **A brief history of the organizing committee**

In the middle of 2015, I started to plan for  
an international conference on  
Indigenous policy in Sapporo in 2017  
with my international and Ainu friends.  
As 2017 marks the tenth anniversary of  
the historic adoption of the United  
Nations Declaration on the Rights of

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Indigenous Peoples (UNDRIP) by the UN General Assembly, it occurred to me that it would be a perfect time to assess the impacts of the UNDRIP on Indigenous policies. I continued planning for more than two years with organizing committee members as Ryoko Tahara, then vice-president of the Sapporo Ainu Association; Kamrul Hossain, director of the Northern Institute of Environmental and Minority Law (NIEM), Arctic Centre, University of Lapland in Rovaniemi Finland; Anna Petr  tei, researcher at the NIEM; Leena Huss, Professor at the Hugo Valentin Centre, Uppsala University in Sweden; Satu Gr  ndahl, Associate Professor at the Hugo Valentin Centre; and Masumi Tanaka, researcher at the Centre for Environmental and Minority Policy Studies (CEMiPoS), online center directed by me. The organizing committee was joined later by Tomas Colbengtson, lecturer at University of Arts, Crafts and Design in Stockholm, and Maile Taulii, Assistant Professor, Native Hawaiian and Indigenous Health Office of Public Health Studies, Myron B Thompson School of Social Work Hawaiinuiakea, School of Hawaiian Knowledge, University of Hawai'i in M  noa.

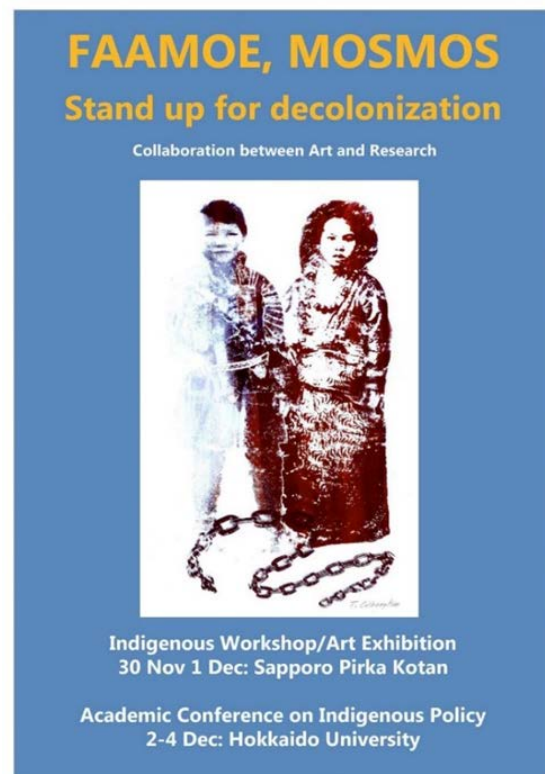


Photo 1. The poster designed by Tomas Colbengtson

In July 2016, Tomas Colbengtson joined the organising committee soon after Ryoko Tahara and I assisted him in launching a joint exhibition with Ainu artist Koji Yuki in Sapporo and Nibutani, Hokkaido, Japan. The exhibition was a first watershed, a big step for us. We then decided to combine the planned academic conference on Indigenous policy with a corresponding Indigenous workshop/art exhibition, the whole event lasting five days from November 30th to December 4th in Sapporo, Japan. The poster for the conference/art exhibition was designed by Colbengtson and bore the slogans "Stand up for Decolonisation" and "Collaboration between Art and Research" (Photo 1).

Shortly afterward, Colbengtson personally encouraged more than ten Indigenous artists of his acquaintance in Norway, Sweden, Finland and Greenland to apply for funding to join the Indigenous workshop/art exhibition together with Ainu artists in Sapporo. In December 2016 when our call for papers was announced, Kamrul Hossain came to Sapporo to undertake preliminary discussions on the International Conference on Policy towards Indigenous peoples with Masumi Tanaka and me. This conference followed as an extension of my ongoing collaboration with him dating back to 2009. He also recommended several young researchers of his team at the NIEM to take part in the conference.

In January 2017, Ryoko Tahara convened the last preparatory committee meeting for the establishment of the Ainu Women's Association. Its primary aim was to empower Ainu women to take back their Indigenous rights. The programme of their activities in 2017 included the co-hosting of the International Conference on Policy towards Indigenous Peoples and corresponding Indigenous Workshop/Art Exhibition in Sapporo from 30 November to 4 December with the CEMiPoS in collaboration with the Hugo Valentin Centre and the NIEM. In February 2017, the Hokkaido Shimbun Press, the most influential newspaper in Hokkaido, reported Hossain's

involvement in the international conference as a series of its reports on the international conference (Photo 2). In March 2017, Colbengtson visited Sapporo again for the purpose of having preliminary discussions concerning the Indigenous workshop/art exhibition with three directors of the Ainu Women's Association: Ryoko Tahara, Tomoko Mitsuno, and Yoko Sasaki, (Photo 3), along with Masumi Tanaka and me.



Photo 2. The Hokkaido Shimbun Press published its interview with Kamrul Hossain on 8 February 2017



Photo 3. Tomas Colbengtson speaking with three directors of the Ainu Women's Association with interpreting by Masumi Tanaka in Sapporo



The second watershed for us came with Maile Taualii. In May 2017, she proposed a session of Indigenous health issues to be included in the international conference just before the call for papers was over. The organizing committee immediately accepted her proposal and extended the call for papers to the middle of June. The inclusion of a session of Indigenous health issues made the conference much more comprehensive. Taualii was also planning to bring a number of her students to Sapporo to highlight their work at her session. In September, she confirmed she and her students were preparing to travel to Sapporo. Furthermore, in the middle of November, I had the last preliminary discussions with Leena Huss, Satu Gröndahl, Tomas Colbengtson, and Kamrul Hossain at the Hugo Valentin Centre in Uppsala regarding the five-day art and academic event (Photo 4). At that time, they were confident that the event would be successful, though I still had a vague feeling of anxiety. At about that time in Rovaniemi, Anna Petrétei was finalizing the 120-page abstract book. In Sapporo, steering committee members—in particular, Jeff Gayman, associate Professor at Hokkaido University, Hiroyuki Domon, vice president at Takushoku University Hokkaido College, and core volunteer interpreters: Ritsuko Hirose, Kazuko Backhouse, Misao Matsumura and Makoto Shimizu were working on the

organizing of the venues along with members of the Ainu women's Association. Additionally, it should be noted that Leena Huss had immediately responded to my frequent requests for consultation all the time throughout the two-year period of preparation.



Photo 4. Satu Gröndahl, Leena Huss, Hiroshi Maruyama, Kamrul Hossain, and Tomas Colbengtson (from left to right) at the Hugo Valentin Centre, Uppsala University

## Key areas of the International Conference

The international conference aimed to assess the existing policies towards Indigenous peoples at local, regional, and global levels in light of the UNDRIP and with a view to decolonizing those policies. Given that the purpose of the UNDRIP is to remedy the historical denial of the right of self-determination and related human rights (Anaya 2009: 191), and that special measures are required to safeguard the right of Indigenous peoples to lands, territories and resources which they have

traditionally owned, occupied or otherwise used or acquired (Anaya 2009: 193), discussion was to focus on two key areas:

1. Redress for historical injustices imposed on Indigenous peoples and their struggle for Indigenous rights

2. Exploitation of natural resources by external powers in Indigenous communities and their resistance against them

I thought that the former key area could be handled by two international lawyers: Hossain and Petrétei at the NIEM and that the latter could be taken responsibility by me, director of the CEMiPoS.

Furthermore, given that special measures are also required to restore and secure Indigenous peoples' rights in relation to culture, religion, traditional knowledge, the environment, physical security, health, education, the welfare of women and children, the media, and maintaining traditional relations across international borders (Anaya 2009: 193), the following three key areas were added to the themes of the conference.

3. Linguistic and cultural revitalization led by Indigenous peoples in the wake of cultural genocide under colonialism

4. Indigenous women on the front line of sufferings and struggles

5. Indigenous health issues

In regard to a relationship between the special measures listed above and three key areas, linguistic and cultural revitalization are to be related to religion, traditional knowledge, education, the media and maintaining relations across international borders. Indigenous women on the front line of sufferings and struggles include the welfare of women and children. Indigenous health issues are regarded as composed of physical security and health. Thus the five key areas were considered to cover almost all of the rights of Indigenous peoples guaranteed by the UNDRIP. Leena Huss, who over the years has done major research on minority languages, language policies, and the revitalization of the Sami languages, was responsible for the third key area. Satu Gröndahl once intimated to me the important roles Elsa Laula Renberg and other female Sami leaders played in improving the status of Sami people. It led to the inclusion of the sufferings and struggles of Indigenous women as one of the key areas, handled by Gröndahl. Additionally, the area of Indigenous health issues was delegated to Maile Taulii.

The programme of the international conference was reflective of my concept

of Indigenous policy. In my opinion, the progress of Indigenous policy has been facilitated by Indigenous activists' continual struggle against colonialism and by the endorsement of international layers and NGOs. It is proved by the 2007 adoption of the UNDRIP by the UN General Assembly. The International Conference of Policy towards Indigenous Peoples was, therefore, organized to be a space where Indigenous/non-Indigenous researchers tackle problems facing Indigenous peoples through their presentations, work out how to support Indigenous peoples' struggle on the basis of international human rights law, including the UNDRIP, and human security, through exchanging opinions with those people concerned, and get a clue as to how to find solutions from discussion with others, including Indigenous peoples. Furthermore, since international human rights standards guarantee the free, prior, and informed consent of Indigenous peoples to decisions affecting them, it was crucial that Indigenous values were at the center of discussions concerning Indigenous policy.

### **Indigenous Workshop/Art Exhibition**

Prior to the international conference, from 30 November to 1 December, the Indigenous Workshop/Art Exhibition

was held at Sapporo Pirka Kotan. The day before the start, international Indigenous artists, including Tomas Colbengtson, Britta Marakatt Labba, Julie Edel Hardenberg, Antonie Grahamsdaughter, Matti Aikio, Marie Persson Njajta, Anni Linn Fjällström, Lena Stenberg, and Ngaroma Riley, jointly presented their art and exchanged ideas among themselves and with Ainu artists: Koji Yuki, Shizue Ukaji, Ryoko Fujioka, Hiromi Abe, Yukari Naganawa and Kayoko Hiramura (Photos 5, 6, 7, 8).



Photo 5. Participants in the Indigenous Workshop/Art Exhibition at Sapporo Pirka Kotan on 1 December 2017

Ranging in form from embroidery to video installation, their artworks expressed feelings of veneration for nature and ancestors, and their strong will to transmit their culture and history from generation to generation, and some of them explicitly sent us a message of decolonization (Photo 9, 10, 11, 12). During the art exhibition, international



Indigenous performers, including Torgeir Vassvik and Elisabeth Heilmann Blind (Photo 13), were brought together with Ainu performers such as Ponpe Ishii and Koji Yuki for improvisations. The atmosphere inside Sapporo Pirka Kotan was full of enthusiasm, a sense of solidarity and international friendship. After the Indigenous Workshop/Art Exhibition, Ryoko Tahara regretfully told me that two days were not enough to show the cultural strength of Indigenous peoples. On 5 December when leaving Sapporo, Antonie Grahamsdaughter was contemplating the possibility to host an art event with Ainu women in Stockholm in 2018. At the beginning of January 2018, Shizue Ukaji and Kayoko Hiramura wrote to me that they felt empowered by participating in the Indigenous workshop/art exhibition.



Photo 6. Britta Marakatt Labba, Elisabeth Heilmann Blind, Tomas Colbengtson and Lena Stenberg (from left to right) at Sapporo Pirla Kotan (By courtesy of Marie Persson Njajta)



Photo 7. Tomas Colbengtson (left) and Kyoko Kagaya (right) in front of Marie Persson Njajta's art (By courtesy of Marie Persson Njajta)



Photo 8. Antonie Grahamsdaughter (left) and Shizue Ukaji (right) with Ainu art



Photo 9. Julie Edel Hardenberg's art



Photo 10. Tomas Colbengtson's glass sculpture

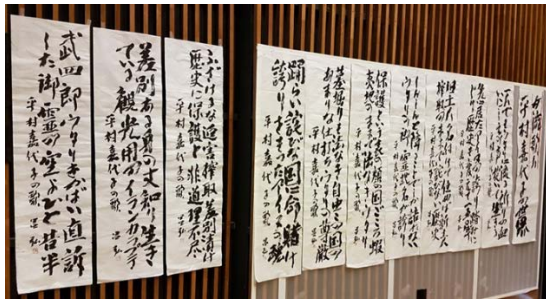


Photo 11. Kayoko Hiramura's tanka



Photo 12. Koji Yuki's art



Photo 13. Elisabeth Heilmann Blind's mask dance performance (By courtesy of Antonie Grahamsdaughter)

Furthermore, four dancers from Amareya Theatre in Gdansk Poland: Katarzyna Pastuszek, Aleksandra Sliwinska, Daniela Komedera, and Monika Wińczyk, and Greenlandic Inuit performer Louise Fontain presented "Nomadic Woman" on the stage (Photo 14, 15, 16). According to their flyer, "Nomadic Woman" is a cross-genre and cross-cultural performance about women and their inner and outer immigration, about the situation of Indigenous women and their relation to inner and outer landscape. It is also based on the true story of Fontain, who was deported to Denmark from Greenland in her childhood to be "civilized" by Danish assimilation policy, and who consequently, lost her mother tongue, contact with her family members and identity. The flyer further tells us that after many years of exile, Fontain finally realized that her true

home is in the inner landscape that she holds within her and in the natural landscape of the far North. “Nomadic Woman” was directed and choreographed by Katarzyna Pastuszek, art director of Amareya Theatre, with technical support from Jakub Miśkiewicz. In Sapporo, Pastuszek decided to recruit an Ainu woman named Tsugumi Matsudaira as a guest performer for “Nomadic Woman” with a view to performing it at the Conference on Bronisław Piłsudski and his research on Ainu people in 2018 planned by Culture Centre Manggha in Cracow, Poland. The new version of “Nomadic Woman” visualized the agonies of Ainu women as well as those of other Indigenous peoples. Sapporo Pirka Kotan resounded with unceasing applause after the performance was over.

All of this occurred in spite of the fact that Sapporo Pirka Kotan was not very well suited to this kind of art event—it is far from the center of Sapporo and has a poorly-equipped stage. Considering that the office of the Ainu Women’s Association is located in Sapporo Pirka Kotan, hosting the Indigenous workshop/art exhibition was aimed to empower Ainu women. For that purpose, we put energy and money into the improvement of the stage for the performance of “Nomadic Woman” with the help of Hiroyuki Domon. Pastuszek and Amareya Theatre finally

succeeded in solving these issues facing their performance. At present Pastuszek is applying to perform “Nomadic Woman” with two Ainu women (Tsugumi Matsudaira and Utae Ehara) at the 2018 CINARS Biennale in Montreal, Canada, as well as the Conference on Bronisław Piłsudski. Matsudaira and Ehara felt highly honored in being chosen as guests for Amareya Theatre’s performance when I talked to them in January 2018. In addition, the venue, reception and lunch for participants were taken care of by the following members of the Ainu Women’s Association: Kimiko Naraki, Chiaki Ihashi, Mika Ishii, Ryoko Fujioka, Yukari Naganawa, Hiromi Abe, and Kyoko Kagaya, as well as two Ainu men Shigeru Naganawa and Toshikazu Ogawa.



Photo 14. Katarzyna Pastuszek, Nomadic Woman





Photo 15. Monika Wińczyk, *Nomadic Woman*



Photo 16. Daniela Komedera, Tsugumi Matsudaira, Katarzyna Pastudszak, Monika Wińczyk, Louise Fontain, and Aleksandra Sliwinska (from left to right)

### **An overview of the International Conference**

From 2 to 4 December 2017, approximately 70 international researchers/artists gathered at Hokkaido University in Sapporo from all over the world, as a result of our regularly distributing calls for papers and updated information through our own blog and Facebook. In fact, I regularly posted original information on the art and

academic event on the blog and Facebook and through Japanese media, while other organising committee members distributed the information further to their friends on Facebook and through other media. The Hugo Valentin Centre at Uppsala University also helped spread information to the world via their home page and Facebook. In the three-day international conference in December 2017 in Sapporo, 36 out of 45 presentations were given by international presenters, mostly researchers from Canada, Finland, Sweden, Norway, Hawai'i, USA, Brazil, New Zealand, Australia, Greenland and India. As main speakers of each session, I invited six revered Ainu elder activists: Shizue Ukaji, Yuji Shimizu, Koichi Kaizawa, Shiro Kayano, Satoshi Hatakeyama and Mamoru Tazawa to the international conference. They presented problems with Ainu policy. It is no exaggeration to say that there are few Ainu who represent the current Ainu struggle against the Japanese government for their rights better than those elder activists. Journalist from the Hokkaido Shimbun Press Yosuke Kosaka and three Professors: Jeff Gayman and Kunihiro Yoshida, Hokkaido University and Kenichiro Hirose, Kagoshima Immaculate Heart University critically analysed Ainu policy in their presentations. Those six Ainu elder activists and three researchers comprise the core of the Citizens' Alliance for the

Examination of Ainu Policy that I co-organised in April 2016 in Sapporo with them for the purpose of proposing an Indigenous rights-based alternative to the current Japanese government-led Ainu policy to the UN human rights monitoring bodies as well as the Japanese government.

While Day 1 and Day 3 had two parallel sessions, Day 2 only had one session focusing on women's issues, chaired by Satu Gröndahl. A panel discussion was held in the morning with two leading Ainu female activists, Shizue Ukaji and Ryoko Tahara, and a discussion on Indigenous women took place in the afternoon with international researchers from Canada, New Zealand, Australia and Sweden. Day 2 was a highlight of the conference, not least in light of empowering Ainu women who co-organised the conference. Thus, the panel discussion and the subsequent presentations were interpreted into Japanese for Ainu and Japanese participants. Throughout the conference, the issue of how to guarantee the rights of Indigenous peoples was discussed in terms of international human rights law, including the UNDRIP, human security and Indigenous values, which is quite different from discussion on Indigenous

policy in Japan that is usually based on the Constitution.<sup>1</sup> Below I will give some glimpses of the international conference based on the sessions I attended.

## Day 1

The opening session began with a welcoming speech of Ryoko Tahara (Photo 17), chief director of the Ainu Women's Association, with an efficient interpreting by Ngaroma Riley, New Zealand Māori. After expressing her gratitude to all the participants for a visit to *Ainumosir* (Ainu land), Tahara spoke:

Many Indigenous peoples throughout the world were forced to be assimilated for colonization. We had been deprived of lands, livelihoods, languages and cultures, and even lost a pride as a people. But I believe such injustices will not last forever...It has been 15 years since we started working towards anti-discrimination against Ainu women. We will be able to bring this pressing problem to the table at this international conference tomorrow. It's amazing to think Ainu women have come so far. From today we kick off the

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<sup>1</sup> Erica-Irene A Daes (2008, p. 23) writes about the UNDRIP as follows: "It should [...] be emphasized that the declaration is a declaration of human rights and it is universally understood in the law of nations that human rights obligations are not subject to contrary domestic legislation. Human rights law prevails over national law". In this context, discussion on Indigenous policy should be based on at least international human rights standards, which is usual in the international community.

International Conference on Policy towards Indigenous Peoples.



Photo 17. Ryoko Tahara (left) addressed the opening session with interpreter Ngaroma Riley (right)

The opening session was followed by Tomas Colbengtson's and my welcoming speeches. Furthermore, lectures were given by two invited speakers: Mark Winchester, lecturer, Kanda University of International Studies, Japan, and Marie Persson Njajta, Sami human rights defender/designer in Sweden.

Under the title of "Backlash: Hate Speech, Indigenous Denial and Historical Revisionism in Post-DRIPS Japan", Winchester lectured on the worsening of the current political situation surrounding the Ainu. His academic specialty is the modern history of Ainu thought. Winchester regards the Ainu experience as essential to understanding modernity in Japan and wider North East Asia, whilst preceding

researchers made use of the Ainu to merely to acquire ethnographic information. He thereby appreciates that the writings of Ainu intellectuals present challenges of thought to be addressed on a global scale. At the same time, as a core member of the Counter Racist Action Collective North, he has been fighting against those who make hate speeches and demonstrations against the Ainu and other minorities. I expect him to lead Ainu studies in Japan. Njajta presented problems faced by Indigenous peoples covering the above-mentioned five key areas under the title of "The Damning of A People: Indigenous Struggle against Past and Present Colonial Behavior; Mining and Exploitation; Striving for a Healthy Future." She lives in Dearnaby/Tärnaby, Sweden, making a living by traditional fishing, gathering herbs, and making Sami handicraft. Creative expressions have always been her way to cope with colonial wounds and abuses. She has put great effort into addressing mining and exploitation issues for almost ten years, due to the fact that traditional South Sami land, water and culture are threatened by a planned large-scale nickel mining project. In the Sami parliament in Sweden, she has been committed to the need for a Truth Commission on the colonial abuses by the Swedish state against the Sami people. In 2017, she represented The Sami Parliament in the Swedish delegation to the UN Commission on the Status of Women

(CSW61). Over the years, I have learned a lot about the situation facing the South Sami in Dearn/Tärnaby from her. Both Winchester and Njajta are courageous enough to confront difficulties by themselves and to make a difference.

After the opening session in the morning, there were two parallel sessions in the afternoon: "Redress for Historical Injustices Imposed on Indigenous Peoples" chaired by Anna Petrétei and "Indigenous Health Issues" moderated by Maile Taulii (Photo 18). I chose the latter session because it was new to me. It was a great pity that I could not attend the former though I knew its all presentations deserved to be heard.

Maile Taulii opened the session with a traditional chant, followed by a presentation which described the need and importance of developing an Indigenous Public Health workforce. She described how the world's first global Master of Public Health (MPH) programme was created at the University of Hawai'i and how the programme focuses on methods, ethics and social justice. She also highlighted the work of a number of students and graduates. Four students - Yuito Okada, Malia Purdy, Siera Kawenaokahokuwelowelo Hirayama, Kamuela Werner, and Landen Muasau - presented their work. Topics included; navigating the health care system with the help of trained family members,

focusing on the family and community for health care interventions, creating a Native Hawaiian place of learning in medical schools, and ensuring Indigenous peoples with disabilities have equal access to land based programmes. Since the launch of the Native Hawaiian and Indigenous MPH programme at the University of Hawai'i in the fall of 2013, 30 students have enrolled in the programme, of which 90% were representative of 6 indigenous nations. There have been 23 graduates, with 8 continuing on with doctoral programmes. The graduate degree programme is building the Indigenous Public Health Workforce while promoting cultural safety practices and influencing Indigenous health policy, public health education, health service mandates, research methodology, and programme evaluation.



Photo 18. Maile Taulii chaired the session of Indigenous health issues

Taulii's session on Indigenous health issues was also augmented by expertise resulting from major long-term studies done by two professors: James Daschuk,



Associate Professor, Faculty of Kinesiology and Health Studies, University of Regina in Canada, and Maria de Lourdes Beldi de Alcantara, Professor, Medical school, University of São Paulo in Brazil. Daschuk began his presentation "Colonialism and the Loss of Indigenous Health: A Canadian Example" by speaking on the Truth and Reconciliation Commission of Canada. He underscored the Commission's statement of health, noting that the current state of Aboriginal health in Canada is a direct result of previous Canadian government policies. Afterwards, he traced the history of malnutrition and famine of First Nations caused by European settlers and portrayed the ongoing disparities in health and life expectancy between Indigenous and mainstream Canadians. Alcantara is a professor of Medical Anthropology in the Medical School of the University of São Paulo, and also a researcher and consultant for the International Work Group of Indigenous Peoples (IWGIA), the head of a NGO "Support Group for Indigenous Youth-GAPK", and an observer of the Permanent Forum for Indigenous Issues at the UN. In her presentation "Dialogue among Indigenous Youth and Physicians in Dourado's Reservation, Mato Grosso do Sul, Brazil", Alcantara expressed her opinion that Western prescriptions could not work for Indigenous peoples and analysed conversations in relation to suicide

between physicians and Indigenous young patients. In addition, Dele Raheem, Post-doctoral researcher, the NIEM, Rovaniemi Finland, contributed to the session by giving the audience an idea of how important food sovereignty is to Indigenous peoples' health.

## Day 2

In the morning panel discussion, Shizue Ukaji (Photo 19) emphasized the importance for the Ainu people of praying daily to their gods. Perhaps it can be asserted that Ainu culture is based on a communal livelihood, which involves praying to deities, as Ainu people believe everything is given by the gods. In Ukaji's lecture, I felt there was underlying message warning younger generations that are losing ties with their traditional livelihoods and communities. Ukaji also blamed herself for having had a child with a Japanese husband with a view to softening features of Ainu people in her child. "I am still suffering from this", she added. In response to my question of why she founded the first Ainu organization in the Tokyo metropolitan area, Ukaji answered that she had suffered, working in Tokyo like a Japanese, far away from her home in Hokkaido and that she wanted to know why Ainu people were in poverty and discriminated against.



Photo 19. Shizue Ukaji

Ryoko Tahara said that she had heard many stories regarding insults to Ainu women while serving as a life coach/social worker for her colleagues. She exemplified this bringing up the cases of Japanese migratory workers who live with Ainu women during summer and leave for their homes in winter. She also explained that by organizing the first Ainu Women's Association she had wanted to improve the situation faced by Ainu women: poverty, lack of opportunities to get an education and employment, and lack of pride caused by a Japanese custom of male dominance. The panel discussion was facilitated by the efficient interpretation by Jeff Gayman and Mark Winchester. Both of them have been involved in Ainu studies in favor of the Ainu for many years, and have earned the trust of the Ainu around them.

In the afternoon, the high rate of human trafficking and sexual exploitation of Indigenous women compared with that of majority women in New Zealand and Canada was respectively discussed by two presentations: "White lies: Centring Māori Women in the Reform of Prostitution Legislation and Policy" was made by Fern Eyles, student, Massey University, New Zealand and Jade Kake (Ngāpuhi), Te Honga Centre, UNITEC Institute of Technology, Programme Manager for Te Mtapahi (National Māori Housing Advocate), Palmerston North, New Zealand; "An Indigenous Grandmothers' Initiative in Response to Human trafficking for Sexual Exploitation of Young Aboriginal Women" was made by Janice Cindy Gaudet (Photo 20), Assistant Professor, Campus Saint-Jean, University of Alberta. Eyles and Kake explored the prostitution of Māori women as a product of colonization and comparable to other indicators of social deficit, while Gaudet presented the culturally-based efforts of Nookimisak-Nangdownjgewad, in which a core circle of Anishinaabek grandmothers and frontline workers began to address sex trafficking and sexual exploitation of women in Anishinaabek communities. In other words, Eyles and Kake sought a resolution by urging the national government of New Zealand to protect the treaty-based rights of Māori women, while Gaudet highlighted the efforts of Indigenous women to tackle the

problem of human trafficking facing them. In her presentation “A World Apart with Shared History: Norwegian Sápmi and Indigenous Australia: Colonisation, Consequences, and Empowerment”, Nina Sivertsen, Ph.D, College of Nursing and Health Sciences, Flinders University, Adelaide, Australia mentioned that the Sami people of Northern Norway and Indigenous Australians share a common fate as Indigenous minorities, emerging from centuries of internal colonization and harsh assimilation policies. Sivertsen admired Indigenous women’s fighting for their rights and security on the front line in such adverse circumstances. Lastly, Satu Gröndahl examined the emergence of new kinds of Sami identity as described in the novels of two Sami female authors, through analyzing female protagonists appearing in those novels. Her presentation “Creating Modern Sámi Identity” highlighted, in an inspiring way, new developments in the identity formation of Indigenous peoples. Those presentations were ably interpreted by Madoka Hammine, PhD student, University of Lapland, Yuito Okada, Master student, University of Hawai’i, Ayako Tominari, Associate Professor, Hokkaido University, and Makoto Shimizu.



Photo 20. Janice Cindy Gaudet (right) made a presentation with interpreter Madoka Hammine (left)

### Day 3

There were eight presentations in the session of exploitation of natural resources in Indigenous communities and Indigenous peoples’ resistance, which was chaired by Marie Persson Njajta and me in the morning on 4 December. Two Ainu elder activists: Satoshi Hatakeyama and Koichi Kaizawa presented problems faced by them with interpretation by Takashi Oda, who had worked for Ainu people as an interpreter. Hatakeyama’s presentation was titled “Towards Restoring Our Indigenous Right to Whaling in Japan”. He is the only Ainu who has claimed the right to Indigenous whaling on the coast of the Sea of Okhotsk despite current prohibition by the authorities. Kaizawa’s presentation was “After the 1997 Court’s Decision over the Nibutani Dam Case”. He is the only survivor of the Ainu plaintiffs who contested the planned Nibutani Dam in

his community against the authorities. Four young researchers: Anna Petrétei, Assi Harkoma, Giuseppe Amatulli from the NIEM, Rovaniemi Finland and Catherine Moriarity, UiT, The Arctic University of Norway, paid attention to international human rights standards to guarantee a full involvement of Indigenous peoples in decisions affecting them when planning and implementing mining and other extractive industrial projects. The titles of those four presentations were as follows: “Resource Development in the Sápmi Region: Integration of Human Rights Impact Assessment in Licensing Processes” (Anna Petrétei), “How Traditional Knowledge of Indigenous People Can Contribute to the Conservation and Protection of Biodiversity” (Assi Harkoma), “Promoting Sustainable Development in Indigenous Communities through the Implementation of the Principle of Free, Prior and Informed Consent (FPIC) and the Use of Traditional Ecological Knowledge (TEK)” (Giuseppe Amatulli), and “Securing Rights: the Duty to Consult and Indigenous Engagement in the Canadian Legal System” (Catherine Moriarity).

As far as two Indigenous scholars: June L Lorenzo, Ph. D, member of Laguna-

Acoma Coalition for a Safe Environment and Indigenous World Association, and Michell Daigle, Assistant Professor, University of British Columbia are concerned, their studies have raised a question of the mainstream legal system. Lorenzo wrote in the abstract of her presentation “Contradictions Abound: Reflections on Impacts of Nuclear Policy on New Mexico Indigenous Peoples” that “using multiple viewpoints to examine the presence of uranium mining and nuclear energy infrastructure among Laguna Pueblo and other Indigenous peoples in New Mexico, I will relate the juxtaposition of Indigenous values with colonial mandates” (Centre for Environmental and Minority Policy Studies 2017: 50). Daigle wrote in her abstract “Resurging through Kistachowan: Indigenous Water Governance at the Heart of Colonial Empire” that “Mushkegowuk water governance is obstructed by colonial jurisdictions and forms of citizenship” (Centre for Environmental and Minority Policy Studies 2017: 52).

After the conference, I realized that we can’t understand article 25 of the UNDRIP <sup>2</sup> without Daigle’s and Lorenzo’s presentations. Lorenzo recalls a moment when they were working to finalize the wording of article 25, stating:

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<sup>2</sup> Article 25 of the UNDRIP reads: Indigenous Peoples have the right to maintain and strengthen their distinctive spiritual relationship with their traditionally owned or otherwise occupied and used lands, territories, waters, and coastal seas and other resources and to uphold their responsibilities to future generations in this regard.

It captures the essence of what Indigenous Peoples, who live in diverse geographies, have in common: a diverse spiritual relationship “with lands, territories, waters and coastal seas.” Many Indigenous representatives insisted on use of the word “responsibilities,” but some State representatives failed to understand its place in a rights-centered document. We insisted and explained our responsibility as stewards to provide for future generations so that they might continue this relationship...We prevailed on this issue (Lorenzo 2017: 12).

Daigle has been involved in the development of new models of Indigenous co-governance and stewardship for water resources that include Indigenous voices, sciences and ontologies at the core of sustainable water resources planning, policy development, and regulatory decision-making (Decolonizing Water). Article 25 must be materialized by Daigle and Lorenzo.

The session of linguistic and cultural revitalization led by Indigenous peoples ran parallel to the session of exploitation of natural resources in Indigenous communities. On 5 December, the Hokkaido Shimbun Press reported the session of linguistic and cultural

revitalization by exemplifying Shiro Kayano’s and Leena Huss’s presentations (Photo 21). Shiro Kayano, director, Kayano Shigeru Ainu Culture Museum, was quoted as saying in his presentation “The Right of the Ainu People to Learn the Ainu Language” that the official recognition of the Ainu language as an official language in Hokkaido must help spread the Ainu language. Leena Huss was reported to have spoken in her presentation “This Is a Beginning, We Must Start Somewhere! – The Work of the Sami Language Centre in Sweden for Language Revitalisation” that two language centers in the traditional South Sami Language areas set up in 2010 in accordance with the Law on National Minorities and Minority Languages in Sweden have been positively tackling with language revitalization and that they have borrowed and developed further advanced revitalization programmes from other countries. Additionally, I asked Masumi Tanaka and Tatsiana Tsagel’nik, Ph.D. student, Hokkaido University, to assist a journalist from the Hokkaido Shimbun Press with interviewing Indigenous artists in English as well as interpreting every English presentation into Japanese at the conference. As a result, the journalist was able to report in detail every day throughout the five-day art and academic event.





Photo 21. The Hokkaido Shimbun Press reported the session of linguistic and cultural revitalization with a photo of the banquet on 5 December 2017

## Artists' participation in the International Conference

In general, art and research share something in common in that they make what can't be visibly seen. Art instinctively moves people to bear Indigenous issues in mind, while the scientific research presented instills attendees with a theoretical framework of the issues at hand. In Sapporo, artists and researchers collaborated with the aim of directing Indigenous policy towards decolonization, ensuring Indigenous peoples' rights, security and livelihood. Artists actively participated in the international conference through exhibiting their artworks at the venue, performing music at breaks (Photo 22), making a presentation ("Methodology of Storytelling to Heal Trauma of Indigenous Peoples" by Katarzyna Pastuszek), actively joining discussions, and hosting a concluding session chaired by Tomas Colbengtson. In

addition to contributing to the academic content of the conference through new perspectives, their participation made the atmosphere warm and welcoming, and consequently, helped connecting participants to each other. Additionally, thanks to international Indigenous artists' participation, the art and academic event was well-publicized both in Japan and Sweden (Photo 23). However, in spite of our attempt to combine art and research on equal terms, there ended up being less room at the conference venue for art presentations.



Photo 22. Torgeir Vassvik (left), Utae Ehara (centre), and Louise Fontain (right) improvised at a break



Photo 23. Marie Persson Njajta was interviewed by a TV crew after her speech

## **Extended programmes**

In addition to the art and academic event, we had two extended programmes: an excursion to Nibutani in Biratori, the birthplace of Ainu studies, and public lectures at Sapporo Freedom School, a NPO, given by two Japanese promising researchers, who study abroad and presented at the international conference. In March 2017, my friend Atsuko Kumagai, member of the Council for Invigorating Local Communities in Biratori, started creating a two-day excursion to Nibutani for us in cooperation with the town office. Thanks to her fun and witty tour, fourteen international researchers/artists, including me, enjoyed meeting local Ainu people and learning living Ainu culture at the excursion. In response to my request, public lectures were willingly given by Yuito Okada, University of Hawai'i, and Madoka Hammine, University of Lapland, Finland. Their presentations – "Cutting-edge Medical Science and Indigenous Studies" by Okada and "Educated not to be Able to Speak Your Own Language?" by Hammine - showed that their studies are more interdisciplinary and ethical than most Japanese Indigenous studies, which often feature a non-interdisciplinary approach and lack of ethical requirement. In addition, the excursion was not created by us, but by local people. The public lectures were also

planned by the Sapporo Freedom School. From our perspective, these extended programmes served to share some outcomes of the art and academic event with local people and civil society.

## **Distinguishing features of the art and academic event**

What further differentiates the art and academic event from other international conferences is that the event was supported by many people. Not only organizing committee members but also steering committee ones had devoted themselves to bringing this event to fruition for months as follows: Two Ainu designers named Tomoko Mitsuno and Yoko Sasaki designed the front and back covers of the abstract book in collaboration with Tomas Colbengtson (Photo 24); Another Ainu designer, Chiyomi Fujioka designed the name cards of participants in collaboration with her colleague Ayaka Ishii; Core volunteer interpreters, including Ritsuko Hirose, Kazuko Backhouse, Makoto Shimizu and Misao Matsumura, translated English abstracts to Japanese, organized the venue for participants and interpreted presentations/conversations in collaboration with Jeff Gayman and Kenichiro Hirose; Those Japanese translations were proofread by Kenichiro Hirose, Associate Professor, Kagoshima Immaculate Heart University; Two old friends of mine Tatsuo Ohkubo and Kimihiko Maekawa



helped us to document presentations, and Hiroyuki Domon helped register participants at the reception with Ainu women, voluntary interpreters and students; My young American friend Andrew Schirmer edited the call for papers and abstracts; Kunihiro Yoshida, Professor of public law, Hokkaido University successfully negotiated with Hokkaido University for use of the venue gratis; Kenichi Matsuoka, former president of the Muroran Institute of Technology, solicited donations from nine companies in Sapporo.

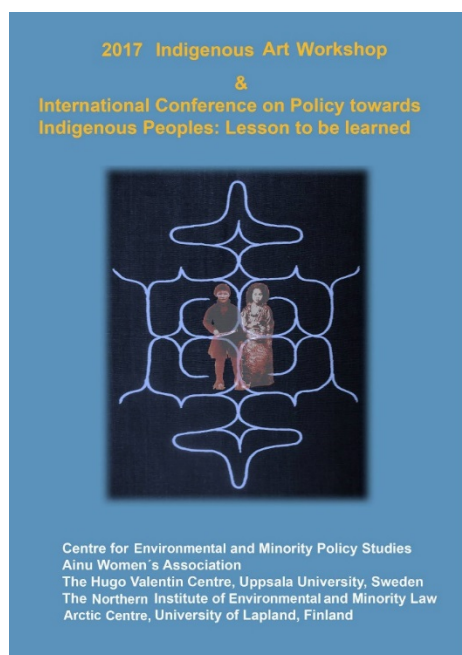


Photo 24. The front cover of the abstract book symbolized an Ainu-Sami collaboration

Furthermore, without other volunteers' contributions, the art and academic event could not have been realized. The reception was managed by Ainu women

such as Yoko Sasaki, Tomoko Mitsuno, Akiko Tahara, Kayo Tsukiyama and Yoko Kawakami. Volunteer interpreters, including Ngaroma Riley, Ayako Tominari, Madoka Hammine, and Yuito Okada, interpreted presentations. Many other volunteer interpreters assisted the core volunteer interpreters in helping Ainu participants to understand English presentations by whispering in Japanese, and facilitated conversations between international artists/researchers and Ainu participants. Around 40 people, mostly my friends, donated to us from their purses in response to my request. As a result, nearly three quarters of the costs of the art and academic event was covered by donations. Delicious Ainu food for the banquet (Photo 25) was cooked by seven Ainu women: Hiromi Abe, Satoe Imai, Ayaka Ishii, Kyoko Kagaya, Masako Kawanami, Yukari Naganawa and Ryoko Fujioka. Lastly, around 110 people participated in the banquet with many participants remaining at the venue for a long time after closing. I was reluctant to leave as well.



Photo 25. 110 Participants performed an Ainu circle dance at the banquet (By courtesy of Antonie Grahamsdaughter)

I am closing this essay with a quote from the letter I received after the excursion to Nibutani from Arnaq Grove, Associate Professor, Nutserinermut Oqaluttaanermullu/Department of Translation & Interpreting, Ilisimatusarfik/University of Greenland:

I'm very impressed that you and your organizing group succeeded to make a good program and also to mix academic and non-academic participants. I think that's why the atmosphere was so extremely good during all the conference (and our tour to Nibutani)... My personal view is that academic work will miss a lot of value if it is not intertwined with our emotions... So your idea and the way to organize it was exceptionally good and successful... And wonderful to witness how the Sami and the Ainu found each other as a family reunion. And finally yet another

good thing: I don't think I have ever been together with so many all of them very nice, kind, friendly people before. I already missed them after saying goodbye."

## Acknowledgements

The five-day art and academic event passed in the twinkling of an eye. I was wondering for a while whether it was only a dream. In retrospect, a lot of things happened in the preparation process. Whenever facing any challenge, organizing committee members continued encouraging me to move forward. As time passed, steering committee members stepped in and addressed practical matters. It is, therefore, entirely due to all of them, as well as other Ainu women, presenters and volunteers, that the event was managed. My special thanks go to the Embassy of Sweden and the Embassy of Norway in Tokyo, and the city of Sapporo for their nominal support for us, the Embassy of Poland in Tokyo for its financial support for Amareya Theatre, the Office for Contemporary Art Norway for its financial support for Torgeir Vassvik, and Japanstiftelsen and Estrid Ericsons stiftelse for their financial support for Tomas Colbengtson. Although I can't mention everyone by name, I would like to take this opportunity to express my deepest gratitude to all the people who were involved in the event. As the end of this

acknowledgement, I would like to give thanks to Leena Huss, Andrew Schirmer and Maile Taulii for editing.

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# Applying the concept of eco-restoration enshrined in Convention on Biological diversity combined with traditional ecological knowledge in the Arctic: Case Study- Ecological restoration of Näätämo River

Noor Jahan Punam\*

In this study, focus will be put on how the concept of eco-restoration has been used in the eco-restoration of Näätämo River local in the Finnish Arctic region to show that combining scientific data for eco-restoration with traditional knowledge can bring about effective results at local level. To provide an insight to the matter, the concept of eco-restoration and how the Convention on

Biological Diversity has provided a significance for eco-restoration will be considered.

## Eco-restoration

Activities of human beings are causing depletion to ecosystems at an unprecedented rate.<sup>1</sup> Despite the efforts made globally in favor of nature conservation, many ecosystems involving those critical for human well-being have been either damaged or destroyed.<sup>2</sup> It has been realized that human beings are not capable of conserving the earth's biological diversity by protecting the critical areas, exclusively.<sup>3</sup> It is understood that ecosystem restoration should be a significant element of conservation programmes so that livelihoods of people relying on these degraded ecosystems can be sustained.<sup>4</sup> Ecological restoration has been receiving an increased amount of attention from both scientists and policy-makers due to its focus on the 'long-term holistic recovery of ecosystems'.<sup>5</sup> Ecological restoration is commonly used as a tool of reversal

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<sup>1</sup> Anastasia Telesetsky, An Cliquet and Afshin Akhtar-Khavari, *Ecological Restoration in International Environmental Law* (Routledge, 2017).

<sup>2</sup> Anastasia Telesetsky, An Cliquet and Afshin Akhtar-Khavari, *Ecological Restoration in International Environmental Law* (Routledge, 2017).

<sup>3</sup> IUCN, Ecosystem restoration, <https://www.iucn.org/commissions/commission-ecosystem-management/our-work/cems-thematic-groups/ecosystem-restoration> accessed 30 August 2017.

<sup>4</sup> IUCN, Ecosystem restoration, <https://www.iucn.org/commissions/commission-ecosystem-management/our-work/cems-thematic-groups/ecosystem-restoration> accessed 30 August 2017.

<sup>5</sup> Anastasia Telesetsky, An Cliquet and Afshin Akhtar-Khavari, *Ecological Restoration in International Environmental Law* (Routledge, 2017).

against environmental degradation caused by human actions like deforestation, pollution and land use practices which cause soil erosion although variant ecosystems will recover at different rates.<sup>6</sup>

The most widely used definition of Ecological Restoration is provided by Society for Ecological Restoration (SER) in its Primer and for the purpose of this article, we will be using this definition. It has been defined as the ‘process of assisting the recovery of an ecosystem that has been degraded, damaged, or destroyed’.<sup>7</sup> The reference to the terms assist and recovery have importance and they were meant to be general enough to accommodate diverse activities designed to make ecosystems regain their health, integrity or other ecological functions.<sup>8</sup> It is further elaborated by the SER Primer that, ‘Ecological restoration is an intentional activity that initiates or

accelerates the recovery of an ecosystem with respect to its health, integrity and sustainability...Restoration attempts to return an ecosystem to its historic trajectory’.<sup>9</sup> What is termed as ecological restoration or ecosystem restoration is not to be confused with ‘restoration ecology’ as per the SER Primer.<sup>10</sup> It is essentially an interdisciplinary process of undertaking restoration task, which must be inclusive of the experiences, political ideals and cultural practices held by people as well as their communities.<sup>11</sup> This makes ecological restoration specifically inspiring. Thus, it is not astounding that interest in ecological restoration is growing at a fast pace all over the world and that in most cases, cultural beliefs and practices are drawn upon to assist in the determination and shaping of what should be conducted under the umbrella of restoration.<sup>12</sup>

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<sup>6</sup> José M. Rey Benayas, et al. ‘Enhancement of Biodiversity and Ecosystem Services by Ecological Restoration: A Meta-Analysis’ (2009) *Science* 325, 1121.

<sup>7</sup> Society for Ecological Restoration Science and Policy Working Group, ‘The SER Primer on Ecological Restoration’ (2002) available at <https://nau.edu/uploadedFiles/Centers-Institutes/ERI/Forms/Resources/ser-primer.pdf> accessed 30 August 2017.

<sup>8</sup> Stuart K. Allison, S. *Ecological Restoration and Environmental Change: Renewing Damaged Ecosystems* (Routledge 2012) 5.

<sup>9</sup> Society for Ecological Restoration Science and Policy Working Group, ‘The SER Primer on Ecological Restoration’ (2002) available at <https://nau.edu/uploadedFiles/Centers-Institutes/ERI/Forms/Resources/ser-primer.pdf> accessed 30 August 2017.

<sup>10</sup> Society for Ecological Restoration Science and Policy Working Group, ‘The SER Primer on Ecological Restoration’ (2002) available at <https://nau.edu/uploadedFiles/Centers-Institutes/ERI/Forms/Resources/ser-primer.pdf> accessed 30 August 2017.

<sup>11</sup> Anastasia Telesetsky, An Cliquet and Afshin Akhtar-Khavari, *Ecological Restoration in International Environmental Law* (Routledge, 2017) at 24.

<sup>12</sup> Society for Ecological Restoration Science and Policy Working Group, ‘The SER Primer on Ecological Restoration’ (2002) available at <https://nau.edu/uploadedFiles/Centers-Institutes/ERI/Forms/Resources/ser-primer.pdf> accessed 30 August 2017.

Nevertheless, the idea held in the SER Primer as to the matter that ecological restoration should 'return an ecosystem to its historic trajectory' is not free from controversies. Ecologists have commonly noted that it is generally that returning to past ecosystems is not possible per se, i.e. history cannot be repeated.<sup>13</sup> What is meant by ecological trajectory has been described by SER as the 'developmental pathway of an ecosystem through time... The trajectory embraces all ecological parameters. Any given trajectory is not narrow and specific. Instead, a trajectory embraces a broad yet confined range of potential ecological expressions through time'.<sup>14</sup>

The legal basis for positing the significance of eco-restoration is contained in the Convention on Biological Diversity. Article 8(f) of the Convention on Biological Diversity provides that: 'Each Contracting Party shall, as far as possible and as appropriate...rehabilitate and restore degraded ecosystems and promote the recovery of threatened species, inter alia, through the development and implementation of plans or other

management strategies'.<sup>15</sup> In addition to that Article 10(d) of the convention provides that each contracting party should so far as possible 'support local populations to develop and implement remedial action in degraded areas where biological diversity has been reduced'. Gardner has explained that when speaking of remedial actions as to degraded wetlands, it would be inclusive of restoration of the site to its previous condition<sup>16</sup> and it would obviously apply to other kinds of ecosystems.

A specifically significant development with regards to restoration has been noticed in the CBD Strategic Plan for Biodiversity 2011-2020, adopted as Decision X/2 at the 10<sup>th</sup> COP<sup>17</sup> where it has been recognized as a crucial component. The vision of the Plan is a world of 'Living in harmony with nature' where 'by 2050, biodiversity is valued, conserved, restored and wisely used, maintaining ecosystem services, sustaining a healthy planet and delivering benefits essential for all people'.<sup>18</sup> As can be seen restoration is a part of this mission and it is also the

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<sup>13</sup> J. van Andel and J. Aronson, 'Getting started', in J. van Andel and J. Aronson (eds), *Restoration Ecology: The New Frontier* (2nd Edn, Wiley-Blackwell 2012).

<sup>14</sup> Society for Ecological Restoration Science and Policy Working Group, 'The SER Primer on Ecological Restoration' (2002) available at [https://nau.edu/uploadedFiles/Centers-Institutes/ERI/\\_Forms/Resources/ser-primer.pdf](https://nau.edu/uploadedFiles/Centers-Institutes/ERI/_Forms/Resources/ser-primer.pdf) accessed 30 August 2017.

<sup>15</sup> Article 8(f), CBD.

<sup>16</sup> RC Gardner, 'Rehabilitating Nature: A comparative review of Legal Mechanisms that Encourage Wetland Restoration Efforts' (2003) 52 *Catholic University Law Review* 573.

<sup>17</sup> CBD, Decision X/2 (The Strategic Plan for Biodiversity 2011-2020 and the Aichi Biodiversity Targets).

<sup>18</sup> CBD, Decision X/2 (The Strategic Plan for Biodiversity 2011-2020 and the Aichi Biodiversity Targets).



central topic of two separate targets within the Aichi Biodiversity Targets and it states that: 'By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks have been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification'.<sup>19</sup> In addition to that the Aichi targets also include: 'By 2020, ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable'.

The COP decision very clearly highlights the significance of restoration equivalently to the prevention approach and states that, 'While longer-term actions to reduce the underlying causes of biodiversity are taking effect, immediate action can help conserve biodiversity, including critical ecosystems, by means of protected areas, habitat restoration, species recovery

programmes and other targeted conservation interventions'.<sup>20</sup>

The significant role restoration can play was even more expressly emphasized at the COP in 2012 whereby contracting parties adopted Decision XI/16 noting that, 'ecosystem restoration will play a critical role in achieving the Strategies Plan for Biodiversity 2011-2020, including conservation of habitats and species'.<sup>21</sup>

### **Combination of eco-restoration and traditional ecological knowledge**

Extensive knowledge is held by the traditional people of the world regarding the natural resources they use.<sup>22</sup> The Convention on Biological Diversity asserts that it can be used as a source of information which can be used for conservation, management and sustainable use of natural resources and traditional knowledge has also been regarded to significant in informing scientific approaches to management of natural resources.<sup>23</sup> The collaboration of indigenous traditional knowledge and science can contribute to adaptive management according to Berkes, Colding and Folke.<sup>24</sup> Science, at present

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<sup>19</sup> Target 15 of Aichi Targets.

<sup>20</sup> CBD, Decision X/2 (The Strategic Plan for Biodiversity 2011-2020 and the Aichi Biodiversity Targets).

<sup>21</sup> CBD Decision XI/16 (Ecosystem Restoration, Preamble, para 2.

<sup>22</sup> F. Berkes, *Sacred Ecology* (Routledge 2008).

<sup>23</sup> Gadgil, M., F. Berkes & C. Folke, 'Indigenous knowledge for biodiversity conservation' (1993) *AMBIO*, 22: 151–156.

<sup>24</sup> F. Berkes, J. Colding & C. Folke, 'Rediscovery of traditional ecological knowledge as adaptive management' (2000) *Ecological Applications*, 10: 1251–1262.

has limited effectiveness with respect to environmental issues of increasing magnitude and complicity has also made room for the acknowledgement of substitute sources of knowledge.<sup>25</sup> There are many examples where indigenous traditional knowledge has complemented ecological data collected previously by contributing concordant and additional information at a more specific geographic scale compared to scientific data.<sup>26</sup> The current interest in ecological restoration is increasing and it is recognised more and more that ecological restoration must consider cultural practices by the indigenous population in the same way as ecological processes.<sup>27</sup> It has also been suggested that traditional knowledge has co-evolved with ecosystems<sup>28</sup> and thus, provide a solid base for ecological restoration.<sup>29</sup> Nevertheless a number of scholars have been sceptic about the

scientific legitimacy of traditional knowledge and its effectiveness beyond the local level whereas others are concerned about the ethical issues of exploiting traditional knowledge for the purpose of academic or policy matters.<sup>30</sup> As such, integrating traditional knowledge within top-down approaches to ecological restoration still appears to be a great challenge.<sup>31</sup> However, community participation is very important throughout the restoration process, specifically when it concerns societies with important traditional knowledge that is inherently connected to biodiversity and natural resources management.<sup>32</sup> In those landscapes where the influence of traditional people has been given recognition, cultural and social features of ecological restoration become

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<sup>25</sup> M. Stevenson, 'Traditional knowledge and sustainable forest management' (2005) Sustainable forest management network, Edmonton, Alberta.

<sup>26</sup> H. Moller, F. Berkes, B. O. Lyver & M. Kislalioglu, 'Combining science and traditional ecological knowledge: Monitoring populations for co-management' (2004) *Ecology and Society*, 9: 2.

<sup>27</sup> E. S. Higgs, *Nature by Design: People, Natural Process, and Ecological Restoration* (MIT Press, Cambridge, Massachusetts 2003)

<sup>28</sup> J. Long, A. Tecle & B. Burnette, 'Cultural foundations for ecological restoration on the White Mountain Apache Reservation' (2003) *Conservation Ecology*, 8: 4.

<sup>29</sup> N. J. Turner, M. B. Ignace & R. Ignace, 'Traditional ecological knowledge and wisdom of aboriginal people in British Columbia' (2000) *Ecological Applications*, 10: 1275–1287.

<sup>30</sup> N. Chalmers and C. Fabricius, 'Expert and generalist local knowledge about land-cover change on South Africa's Wild Coast: Can local ecological knowledge add value to science?' (2007) *Ecology and Society*, 12: 10.

<sup>31</sup> J. He, Z. Zhou, H. Weyerhaeuser & J. Xu, 2009. Participatory technology development for incorporating non-timber forest products into forest restoration in Yunnan, southwest China (2009) *Forest Ecology and Management*, 275: 2010–2016.

<sup>32</sup> P.S. Ramakrishnan, 'Participatory use of traditional ecological knowledge for restoring natural capital in agroecosystems of rural India' in J. Aronson, S. J. Milton & J. N. Blignaut (eds). *Restoring Natural Capital: Science, Business and Practice* (Island Press, Washington, DC 2007).

particularly significant.<sup>33</sup> The role of indigenous traditional knowledge for the purpose of ecological restoration has been acknowledged in recent years<sup>34</sup> but its probable contribution has not been studied properly.<sup>35</sup>

### **Case Study: Ecological Restoration of Näättämo River, Finland**

The Näättämo watershed is located in the Finnish-Norwegian borderlands and it is a major Atlantic salmon stream<sup>36</sup> and it has a wide diversity of fish species.<sup>37</sup> It is the home of Skolt Sami people and they live in Sevettijärvi area of Finland. Currently, management of the Näättämo salmon fishery is governed by the Atlantic Salmon Management Bilateral Agreement between Norway and Finland. The Skolt Act of Finland implies responsibilities on the state towards the recognition of Sami rights. The Act

provides for user rights as to traditional lifeway of hunting, herding and fisheries but it has been poorly executed.<sup>38</sup> The Eastern Sami people have expressed that their cyclical and non-linear view of the world has not been sufficiently accounted for in the management of natural resources by the State.<sup>39</sup> They claim that partly due to this, the ecosystems have faced their demise and it is threatening their way of life, accordingly.<sup>40</sup> As a response, the Skolt Sami got involved in a community-based initiative supported by Snowchange Cooperative to comprehend the status of and to undertake ecological restoration of the damaged parts of the Näättämo basin. The process began in 2011 and it was the first attempt for a formal process of co-management by combining indigenous knowledge and science in Finland. It focused on responding to negative

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<sup>33</sup> Garibaldi, A. & N. Turner, 'Cultural keystone species: Implications for ecological conservation and restoration' (2004) *Ecology and Society*, 9: 1.

<sup>34</sup> M. K. Anderson, 'The contribution of ethnobiology to the reconstruction and restoration of historic ecosystems' in D. Egan & E. A. Howell (eds). *The Historical Ecology Handbook: A Restorationist's Guide to Reference Ecosystems* (Island Press, Washington, DC 2001).

<sup>35</sup> M. Perrow, and A. J. Davy (eds), *Handbook of Ecological Restoration, Volume 2: Restoration in Practice* (Cambridge University Press, Cambridge 2002).

<sup>36</sup> Tero Mustonen and Pauliina Feodoroff, 'Ponoi and Näättämo River Collaborative Management Plan' (2013) *Waasa Graphics Oy*.

<sup>37</sup> J. Marina Apgar, Tero Mustonen, Simone Lovera and Miguel Lovera, 'Moving Beyond Co-construction of Knowledge to Enable Self-Determination' (2016) *IDS Bulletin* Vol. 47 No. 6.

<sup>38</sup> J. Marina Apgar, Tero Mustonen, Simone Lovera and Miguel Lovera, 'Moving Beyond Co-construction of Knowledge to Enable Self-Determination' (2016) *IDS Bulletin* Vol. 47 No. 6.

<sup>39</sup> Skolt Sámi Nation and Snowchange Cooperative (2011) Sevettijärvi Declaration, [www.snowchange.org/pages/wp-content/uploads/2011/10/SEVETTIJARVI\\_DECLARATION.pdf](http://www.snowchange.org/pages/wp-content/uploads/2011/10/SEVETTIJARVI_DECLARATION.pdf) accessed 30 September 2017.

<sup>40</sup> Skolt Sámi Nation and Snowchange Cooperative (2011) Sevettijärvi Declaration, [www.snowchange.org/pages/wp-content/uploads/2011/10/SEVETTIJARVI\\_DECLARATION.pdf](http://www.snowchange.org/pages/wp-content/uploads/2011/10/SEVETTIJARVI_DECLARATION.pdf) accessed 30 September 2017.

impacts of climate change and the need to tackle previous ecological damages.<sup>41</sup> Co-construction of the process was expedited by combining indigenous knowledge and science in a joint process of comprehending the changes in the ecosystem and by relating them to livelihood strategies. It began with thorough baseline work which involved the preparation of the Eastern Sami Atlas.<sup>42</sup> The Atlas included information on indigenous governance of water bodies which was in practice before large-scale colonial presence. Interviews conducted by Snowchange Co-operative with local fishermen and women in Skolt language contributed to the process by providing information about salmon, names of places and past environmental change which assisted in documentation of traditional knowledge.<sup>43</sup> Based on the historical baseline, local fishermen and women from the area were leading the environmental monitoring of the watershed between 2013 and 2014.

Throughout the summer field season, they were recording what observed with digital camera and continuously shared them with the science team. This

developed a new field method which was called visual-optic histories.<sup>44</sup> It amounted to the detection of new species entering the ecosystem. For instance, they recorded for the first time that there was the southern Potosia cupra scarabaeid beetle and this was recorded through oral communication. Observations and photographs from the field by Skolts were put together with a species identification by a specialist on insects which confirmed the new geographical discovery. Furthermore, observations of water level and temperature fluctuations which are connected to salmon movement patterns and changes in quality of water like algae blooms and foam were co-constructed by sharing the monitoring data with limnological data available publicly for the basin.<sup>45</sup>

Throughout the Atlantic salmon fishing season, records were kept regarding the catches by the Skolts. These statistics were compared with scientific surveys of the quantities and qualities of salmon

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<sup>41</sup> Tero Mustonen and Kaisu Mustonen, 'Näätämö River Collaborative Management Efforts by the Skolt Sami' (2015) *Snowchange Cooperative*.

<sup>42</sup> Tero Mustonen and Kaisu Mustonen, 'Näätämö River Collaborative Management Efforts by the Skolt Sami' (2015) *Snowchange Cooperative*.

<sup>43</sup> Tero Mustonen and Pauliina Feodoroff, 'Ponoi and Näätämö River Collaborative Management Plan' (2013) *Waasa Graphics Oy*.

<sup>44</sup> Tero Mustonen, 'Communal Visual Histories to Detect Environmental Change in Northern Areas: Examples of Emerging North American and Eurasian Practices' (2015) *Ambio* 44.8: 766–77.

<sup>45</sup> J. Marina Apgar, Tero Mustonen, Simone Lovera and Miguel Lovera, 'Moving Beyond Co-construction of Knowledge to Enable Self-Determination' (2016) *IDS Bulletin* Vol. 47 No. 6.

coming up in the river.<sup>46</sup> For instance, the Skolt records noticed an increase in the number of northern pike to stream sections of the river proximate to Opukasjärvi. No observation science records have been detected yet but it could assist in understanding the warming up of waters. It also recorded on maps what was thought to be lost salmon spawning areas.<sup>47</sup> These sites were lost because of state-sponsored management actions, particularly the forestry experiments which were conducted in 1960s and 1970s and also the development of new boating routes. The recording of sites of erosion on lake and river banks which are sign of possible climate change impact were vital for facilitating ecological restoration activities.<sup>48</sup>

This process amounted to the revitalization of Sami knowledge by creating a community-based traditional knowledge archive to assist the community and research work in future. Moreover, using indigenous knowledge in monitoring has resulted in new management options and actions for the watershed. Although the co-management is yet not made formal but

national institutes like Metsähallitus, the local Centre for Economic Development, Transport and the Environment have shown their interest in learning about novel management alternatives by a Skolt research agreement.<sup>49</sup>

## Conclusion

The case study is one of the examples where the concept of eco-logical restoration has been successfully used at local level for the restoration of the Näätämo river. It would not be possible to achieve such an effective result without combining scientific data with indigenous traditional knowledge. At local level, such practice might lead to effective restoration of ecological processes which has been disturbed by the impacts of climate change.



<sup>46</sup> Tero Mustonen and Kaisu Mustonen, 'Näätämo River Collaborative Management Efforts by the Skolt Sami' (2015) *Snowchange Cooperative*.

<sup>47</sup> Tero Mustonen and Kaisu Mustonen, 'Näätämo River Collaborative Management Efforts by the Skolt Sami' (2015) *Snowchange Cooperative*.

<sup>48</sup> Marina Apgar, Tero Mustonen, Simone Lovera and Miguel Lovera, 'Moving Beyond Co-construction of Knowledge to Enable Self-Determination' (2016) *IDS Bulletin* Vol. 47 No. 6.

<sup>49</sup> Marina Apgar, Tero Mustonen, Simone Lovera and Miguel Lovera, 'Moving Beyond Co-construction of Knowledge to Enable Self-Determination' (2016) *IDS Bulletin* Vol. 47 No. 6.

# Law in the Digital Era - Perspectives from IP Law, Contract Law & IT Law

*Dele Raheem\**

Dele Raheem, participated in a conference on “**Law in the Digital Era - Perspectives from IP Law, Contract Law and IT Law**” at the University of Lapland from 10th – 12th December, 2017.

## Introduction

Digitalization and digital technologies are increasingly driving towards revolutionary changes in the innovation system, affecting industries, universities and public institutions. Big data, 3D printing, software and AI technologies are pushing corporations towards adapting or newly creating business models to cope with the digital disruption. The problem is certainly not only technological or economic but also legal. Indeed, the regulatory framework needs to be shaped in such way that it provides with a fertile and healthy soil for these technological innovations to grow. The conference brought together experts from the academia, industry, as well as policy makers in a joint effort to raise awareness and propose solutions to

some of the key legal disruptions that digitalization is causing in the fields of intellectual property law, contract law and ICT law. The conference was organized by Rosa Maria Ballardini, Lecturer in IP law, University of Lapland, Soili Nysten-Haarala, Professor of Commercial Law, University of Lapland and Rauno Korhonen, Professor of Legal Informatics, University of Lapland. In setting the tone for the conference proceedings, the welcome speech was delivered by the Rector of the University of Lapland, Mauri Ylä-Kotola. He remarked that evidence is part of data, and stressed that there is a difference between information and data. Furthermore, he highlighted that iconological interpretation can be considered as a model in law.

## Conference proceedings

There were nine topics delivered during the conference at the Esko and Asko hall, University of Lapland. The first topic was “Data Sharing, Data Caring & Data Hugging in the Health & Life Sciences: What’s law got to do with it?” delivered by **Timo Minssen**, Professor of Biotechnology Law, University of Copenhagen, Denmark. He stressed that the European Union (EU) according to Carlos Moedas, (EU Commissioner for Research, Science & Innovation) has a goal to create an European Open Science

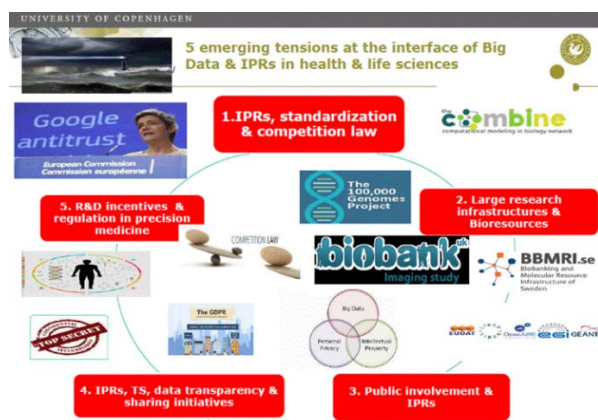
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Cloud to make science more efficient and productive and let millions of researchers share & analyze research data in a trusted environment across technologies, disciplines and borders. This is part of delivering on the digital single market, building the European data economy. In May 2017, the Economist in an article on regulating the internet giants reported that *“The world’s most valuable resource is no longer oil, but data: The data economy demands a new approach to antitrust rule”*.

**Timo Minssen** further emphasized that big data in the health and life sciences are open data and they are open for innovation. Important questions are on whether data that is free, survives and catalyses on all levels, the quality of the data (smart data/polluted data). FAIR principles (findable, accessible, interoperable, re-usable). Beneath the shadows of openness hyperbole: some considerations, confusion IPRs & “sui generis” rights in AI and Big data. The role of artificial intelligence (AI) and blockchain technology in the future.



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He summarized the results of paradigm shift in overlapping challenges to include the interplay of the following nine criteria: a) IPRs with new policies and business strategies will require further studies; b) the urgent need to modernize traditional IP system due to law, business and technology changes; c) the clashes and tensions at the interface of BIG Data/AI, IPRs and competition law on health & life science frontiers; d) recalibration of substantial and procedural IP rules including their governance; e) smart and fair data, the need for cross (Atlantic)-fertilization, studies and alignment of strategies; f) the sustainability of Big Data/Smart Data; g) privacy, competition, regulation of services, sharing tools and data quality; h) public support for legislation crucial (erosion of gate-keeper barriers; i) education, communication, sufficient transparency and diverse (open) innovation standards as the main keys.

The second speaker was **Aleksandr Savelyev**, Associate Professor, Higher School of Economics, Moscow. His title of his presentation was “What is Smart Contract?” He defined smart contract as either a piece of code, which automates performance of some obligations by the parties or a self-sufficient binding agreement existing in the form of computer code. He also stressed that it may also be both. Examples are crowdfunding agreement, agreement of mutual insurance. He explained that the features of smart contracts are: i) Digital,

ii) Contractual terms are embedded in the software code, iii) it is conditional nature i.e (“if X, then Y”), iv) it is self-sufficient, self-enforced, blockchain enabled and v) irrevocable in multiple instances.

The third speaker was **Taina Pihlajarinne**, Professor of Copyright Law, University of Helsinki. The title of her presentation was “Linking and copyright: a problem solvable by using concepts of technical-functional nature?” She questioned how the Court of Justice of the European Union (CJEU)’s recent practice on linking as an act of communication to the public has succeeded in taking account the diversity of legitimate interests? What kind of lesson can be derived from this analysis when considering the nature of basic concepts of copyright (such as communication to the public) in general? The basic copyright concepts might have a tendency to underline the detailed assessment of nature of actions as such. These concepts do not encourage to weighing and balancing of interests. In ideal situations, exclusive rights could be re-formulated. For instance, a flexible formulation stressing the legitimate interests behind the protection and consequences of utilization of the protected object for these interests? She further stresses that there are some controversial area in the basic concepts that are based on international conventions. She concluded that these may not be realistic at this moment.

The fourth speaker was **Christopher Kuner**, Professor of law and co-chair of the Brussels Privacy Hub at the Vrije Universiteit Brussel (VUB) in Brussels. His presentation was on “Reform of EU data protection law: opportunities and challenges for technological innovation”. He joined the conference through skype. According to him, the law of the European Union has influenced the development of the Internet outside the EU’s borders. The details of this influence are too complex, for example from an internet-related area, there are questions about data protection and privacy law. He mentioned some current developing issues: for example, companies are aligning their privacy practices with the new EU General Data Protection Regulation (GDPR) that will come into force on 25 May 2018. As one news story puts it, global technology giants ‘are racing to store their data on the Continent as new laws and privacy concerns drive investment decisions’. Independent data protection authorities (DPAs) of the EU Member States (such as ones in Germany and Spain) have investigated whether parties in third countries comply with EU law with regard to data transferred from the EU. Judgments of the Court of Justice of the EU have led to international controversy, such as the Court’s 2014 Google Spain judgment in which it found that EU data protection law granted individuals a right to suppress search engine results in certain

situations, even though the servers on which the search engine operated were based in California. The EU asserts its regulatory power with regard to the Internet consciously and deliberately. This means that it seeks to have its own legal standards apply outside its borders, and asserts its regulatory authority towards activities in third countries that affect its interests and those of EU individuals. The global reach of EU law influences activity in almost every area relevant to the Internet, including not only data protection but also e-commerce, electronic contracting, Internet governance, and many others.

The fifth speaker was **Päivi Korpisaari**, Professor in Communication Law, University of Helsinki. The title of her presentation was “Freedom of Expression and Criminal Liability in Social Media”. She stressed that criminal and civil legal liability rules are the same regardless of the technology that has been used for publishing the message. She mentioned about the regulation in the Finnish constitution to include the right to receive information and the freedom of expression. The administrator of websites are not responsible of illegal content, exceptions e.g. ethnic agitation, distribution of depictions of violence, distributing sexually offensive pictures especially from children.

The sixth speaker was **Tuomas Pöysti**, Docent in Administrative law, Chancellor of Justice. His presentation was on “Trust in the Era of Digital Administration and Platforms”. He described the digital age as a silent revolution which will also bring about the change of an era and the law. He emphasized the value of trust in the rule of law. The main points from his talk were focused on the following: from Weberian bureaucracy to platforms, networks and ecosystems; an age of distributed and autonomic & intelligent systems; an age of partnership with intelligent machines and systems; a contextual realism and rule of law in a system of constitutional governance - the relevance and efficiency of the fundamental principles of law?; the efficiency of rights that are embedded in the working environment and in the legal/judicial and administrative practice; f) law which can be followed in practice; the art of the realization of idea of justice in specific practical contexts that was inspired by Alf Ross; a contextual realism is needed in the realization of the idea of justice; efficiency of rights and legal certainty contributes to general trust; how supreme guardians of law contributes to coherence and efficiency of rights; rights by design and accountability are foundations of trust; new types of national legislation on information processing are needed; and how the future will be geared towards information law.

The seventh speaker was **Olli Pitkänen**, from IPR University Center, Helsinki. His presentation was on “Artificial Intelligence (AI) and Intellectual property (IP): Challenges to the fundamentals of the Copyright System”. He questioned if the originality of AI and IP can be evaluated and how to evaluate their originality? Currently, most definitions of originality require a human author. Artificial Intelligence cannot be the author. In respect of neighboring rights, some good questions that need to be considered in relation to automatically created works are: a) should they be copyrightable, in the first place? If yes, who should get the copyright? Can AI be the developer, owner, user, or data provider? b) Both the results produced by an AI system and the most valuable parts of the system itself can arguably remain outside the copyrightable subject matter; c) risky to have yet another specific rule in the copyright regime; the concept of back to basics i.e why do we have a copyright system?; d) who should benefit from original works? In this regard, highlight and possibly revise the principles that are involved, with the goal of reducing detailed rules. He advised that lawmakers need to keep calm and not overreact to these developments.

The eighth speaker of the conference was **Seppo Kuula**, from Siili Solutions, Oulunsalo. His presentation was on “New Agile Business Models in IT

business”. He emphasized that digitalization has returned individual customer needs to the center of value creation. Based on service dominant logic (SDL), in the service economy neither product nor service creates value on its own. Value is co-created with the customer. In a service-driven world consumers and their behavior lead the way. Therefore, service systems are seen as the value creational configurations of people, technology, value propositions, and shared information. The digital age is accelerating innovations and shortening service life cycles. He further advised that a firm should always test alternative business models. Concept design and development are done in parallel; pilot customers use the service from the early drafts up to the launched versions. The process of trial and error even continues in production. Using co-creation to create successful services is the new legacy. Design thinking is focused on gaining an understanding of human experience and business targets, based on data. Value co-creation requires a change in the dominant business logic from ‘making, selling and serving’ to ‘listening, customizing and co-creating’. Lean service production focuses on providing value, eliminating waste, facilitating communication, and easing of technology and channel agnostic integration.

The ninth and last speaker of the conference was **Ari Koivumaa** from N-Lex, Rovaniemi. His presentation was on

“Agility from a public buyer's standpoint”. He centered his talk on “Police IT systems and new model for application development”. Traditionally, each IT system has been built around one principal or core technology. A shared centralized component and integration were added later, including user identification, document management, reporting etc. A shift from monolithic systems to component-based, service oriented architecture. For suppliers, higher requirements in regards to the ability to develop and test the functioning of centralized services which includes data protection, document management, information security, and contingency solutions. Deep and dedicated expertise in individual technology components are required. In order to move towards more agile methods will involve a shift from fixed-price projects built on waterfall model towards division of projects into smaller pieces by building one piece at a time while retaining control over the whole; framework agreements with selected suppliers on expert services in various core technologies – simplifying acquisition of expert resources for a specific job for a fixed period of time. In the police IT system, selected resources from different companies working iteratively under the guidance of the police's own project manager and applying gate model improved their efficiency.

## **Relevance to the food system**

Most business enterprises including food business operators will need to be aware of the important aspects of digital law. For example, an important key change is on how digitalization will affect food systems, given the prominent roles that AI, VR will play in the different sectors of food processing, packaging, labelling and distribution. The application of 3D printing in novel foods will also be interesting for both producers and consumers in the nearest future. Experts are warning that there could be adverse implications for some companies' intellectual property portfolios. The new regulations on novel foods, which defined as anything without a significant history of consumption in the EU before 15 May 1997, will come into force on 1 January 2018. Another key change is that authorizations will be generic, which implies that once a novel food is approved it will in most cases be authorized for anyone to market. This largely, will depend on what companies can do to protect their intellectual property. The new regulations certainly represent progress for traditional foods from third countries or for relatively simple products – exotic berries for example. However, manufacturers of innovative synthetic or fermented ingredients who got authorization under the old regulation after investing heavily in research will be disappointed that

their proprietary data is not respected in the way they hoped.

### Concluding remarks

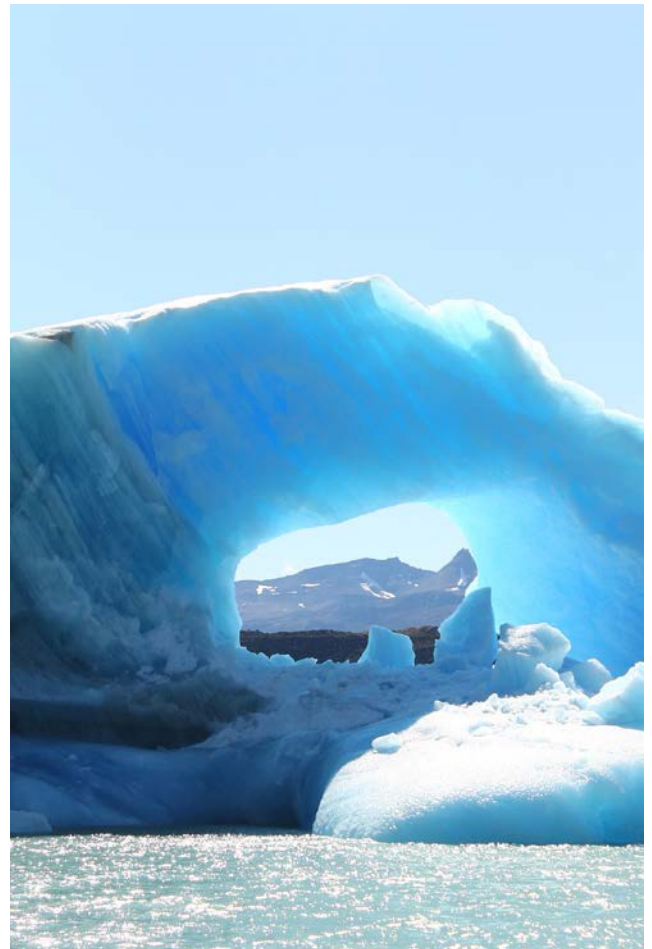
The topics discussed during the conference were very stimulating and they shed more light on what will likely arise in the nearest future when digitalization is considered from legal perspectives with special emphasis on intellectual property, contract and IT laws.



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# Japanese Whalers and Canadian Sealers – Powerless under Discourse and Law?

Nikolas Sellheim\*

## Introduction

It is not a pretty sight, but it is almost certain that we all know the images of blood on the ice after the killing of seals in the commercial seal hunt in Canada. It is equally not a pretty sight to see the capturing and killing of dolphins and pilot whales in the infamous ‘cove’ of Taiji, Japan, which has gained international attention after the release of the award-winning documentary *The Cove* in 2009. In fact, since the sight of killing cetaceans in Taiji is indeed gruesome, international protesters, who have initiated large-scale campaigns worldwide, have prompted local fishermen to fully shield the killing from the public.

This note explores some preliminary parallels between the abilities of Canadian non-indigenous seal hunters communities and Japanese whalers to participate in the legal processes that affect them. It is the first attempt and

thus merely a snapshot to link the situation between marine mammal hunting communities in Canada and Japan. Empirical data have been collected in Newfoundland in 2013, at the 66th meeting of the International Whaling Commission (IWC) in September 2016 in Portoroz, Slovenia, and in Taiji, Japan, in August and September 2017.

## The setting

The field sites in Canada and Japan are located in geographically different regions. Newfoundland is an island surrounded by the northern Atlantic Ocean in South-Eastern Canada, covered by coniferous forests, with rugged coastlines and Arctic sea ice drifting towards its shore from the Davis Strait. It is this sea ice which harbours large numbers of seal species of which the harp seal (*Pagophilus groenlandicus*) has been hunted by Newfoundlanders from the numerous communities, particularly in the north of the island, for local consumption and international trade since the late 18th century – the so-called ‘commercial’ seal hunt.<sup>1</sup> The community of Taiji (population around 3,200) is located in Wakayama Prefecture in Eastern Central Japan amidst steep mountains and marked by a temperate, humid climate. The marine areas of the region are part of the migratory routes of

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<sup>1</sup> Nikolas Sellheim, ‘Morality, Practice and Economy in a Commercial Sealing Community’, *Arctic Anthropology* 52(1) (2015).

numerous cetacean species, which have been hunted for several centuries for local consumption and commerce.<sup>2</sup> Since the IWC has imposed a moratorium on commercial whaling in 1982, Taiji whalers have focused on the hunting and sale of live individuals of different pilot whale and dolphin species (both belonging to the genus *Globicephala*) which are outside the purview of the IWC.

The Canadian seal hunt has come under international opposition since the 1960s due to distribution of graphic accounts of the killing paired with conservation concerns. This has prompted numerous countries to adopt legislation that bans trade in marine mammal and particularly seal products.<sup>3</sup> Awareness of the killing and sale of small cetaceans in Taiji was achieved through the documentary *The Cove* directed by Louie Psihoyos in 2009.<sup>4</sup> As a consequence, international protests took place in the community and have put Japan's whaling practices – also in the Southern Ocean – under significant international pressure. At the core of the opposition

stand animal welfare concerns which have caused local whalers to modernize and adjust their killing methods. However, protests are still ongoing.

### Scope of Legal Recognition

The recognition and inclusion of the indigenous and local population and their knowledge, practices and cultures in managerial processes that affect them is enshrined in the Rio Declaration and its roadmap Agenda 21.<sup>5</sup> Already the earliest treaties limiting the hunting of seals in the Bering Sea from the late 19th century contained clauses which exempted aboriginal communities from any hunting restrictions. These exemptions are justified because of the little impact aboriginal hunting had on the conservation status of seal species.<sup>6</sup>

Generally, the knowledge of indigenous and local communities is to be respected, preserved and maintained in the context of preservation and sustainable use of natural resources as the Convention on Biological Diversity (CBD) stipulates.<sup>7</sup> However, prior as well as after the

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<sup>2</sup> Frank Sowa, *Indigene Völker in der Weltgesellschaft: Die kulturelle Identität der grönländischen Inuit im Spannungsfeld von Natur und Kultur* (Bielefeld: transcript, 2014).

<sup>3</sup> The US, Mexico, Ecuador, Peru, Argentina, Chile, South Africa, Russia, Kazakhstan, Belarus, Australia, New Zealand, Taiwan, and the European Union with 28 Member States have bans on marine mammal/seal products in place.

<sup>4</sup> Sarah Newman, "Taiji's Dirty Little Secret is Out," *Huffington Post*, 29 August 2009, URL: <https://www.huffingtonpost.com/sarah-newman/taijis-dirty-little-secret-247133.html> (accessed 3 December 2017).

<sup>5</sup> The Rio Declaration on Environment and Development, 1992, Principle 22.

<sup>6</sup> An Act to prevent the Extermination of Fur-bearing Animals in Alaska, ch. 114, §7, of 1 July 1870, Section 1.

<sup>7</sup> Convention on Biological Diversity of 5 June 1992 (1760 UNTS 79), article 8 (j).

adoption of the CBD, it has been indigenous – and not local – communities which have been considered in regimes governing the utilization of marine mammals. For instance, the US Marine Mammal Protection Act (MMPA) <sup>8</sup> explicitly exempts native populations from hunting bans in Section 6.B.ii.b.3; The Schedule to the International Convention for the Regulation of Whaling (ICRW)<sup>9</sup> which establishes the moratorium on commercial whaling exempts aboriginal populations from the moratorium provided that they do not engage in the commercialization of whale products; also the EU regime banning trade in seal products <sup>10</sup> in Recital 14 and article 3 exempts Inuit and other indigenous communities from any trade measures when the hunt for seals contributes to their subsistence.

Especially in the latter case, it was at the initiative of Inuit representatives and motivated by the overall legal-political discourse on the rights of indigenous peoples to exploit their traditional resources which prompted the insertion of the ‘Inuit exemption’ into the trade ban. Indeed, also environmental and

animal rights organization appreciate the role of subsistence hunts for indigenous communities and therefore, in principle, do not oppose small-scale utilization of marine mammals.<sup>11</sup>

### **Local Communities and Marine Mammal Hunts – Watersheds**

The case is entirely different for non-indigenous communities that in one way or the other depend on the hunts of marine mammals – an issue which links Newfoundland sealers and Japanese whalers/dolphin hunters. During the adoption process of the EU seal regime, for example, the main representative organizations for commercial sealers – the Canadian Sealers Association (CSA) or the Sealers Association of the Magdalen Islands (ACPIM) – were not present. Commercial sealers, although being most significantly affected by an EU-wide trade ban, were not consulted. Inuit organizations, on the other hand, did see some representation.<sup>12</sup> This is hardly surprising in light of the neglect of recognizing livelihood aspects of commercial seal hunting in the overall discourse on seals and seal hunts. For

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<sup>8</sup> Marine Mammal Protection Act (MMPA) of 21 October 1972 (16 USC Chapter 31).

<sup>9</sup> International Convention for the Regulation of Whaling, 2 December 1946 (161 UNTS 72).

<sup>10</sup> Regulation (EC) No 1007/2009 of the European Parliament and of the Council of 16 September 2009 on Trade in Seal Products (OJ L 286, 31.10.2009, p. 36–39), as amended; and its implementing regulation both in force and replaced.

<sup>11</sup> See for instance “Indigenous Seal Hunts,” *International Fund for Animal Welfare*, URL: <http://www.ifaw.org/united-states/our-work/seals/indigenous-seal-hunts> (accessed 4 December 2017).

<sup>12</sup> Nikolas Sellheim, “Policies and Influence – Tracing and Locating the EU Seal Products Trade Regulation,” *International Community Law Review* 17 (2015).

commercial sealers and the sealing industry the EU ban resulted in a loss of jobs and strains on identity and culture.<sup>13</sup>

While in many aspects different from seal hunters, the situation for whalers in Japan is comparable. Generally, four types of whaling exist in Japan: 1. Scientific whaling in the North Pacific and Southern Ocean; 2. Small-type coastal whaling (STCW) along the coasts of Japan; 3. Aboriginal whaling, though not actively conducted for the time being; and 4. The whale/dolphin drive. For various reasons which will not be explored here and contrary to IWC members and whaling nations Norway and Iceland, Japan is bound by the whaling moratorium.<sup>14</sup> For many years Japan has unsuccessfully lobbied to obtain a quota for STCW, essentially meaning a lifting (or at least softening) of the whaling moratorium. Based on interviews conducted in Taiji, the whaling moratorium caused significant hardships for whalers since many depended on the sale of whale products on the world market. Moreover, since Taiji has seen whaling for centuries, due to their expertise many Taiji whalers were furthermore employed on whaling vessels conducting commercial whaling in the world's seas, particularly in the Southern Ocean. The whaling

moratorium therefore left many whalers unemployed, putting more importance on the utilization of cetaceans outside the purview of the IWC.

Inevitably, over the years of the moratorium, the economic importance of whales and dolphins for Taiji rose. While on the one hand they are killed and consumed locally and regionally, on the other live whales and dolphins are captured and sold to aquariums worldwide. Given the prominence of the Taiji whale/dolphin drive in global discourse, the dissemination of graphic images through the internet by anti-whaling protesters, also the sale of Taiji dolphins to aquariums has become an issue of concern. Following a 2014/15 lawsuit in which an Australian dolphin protection organization sued the Taiji Whaling Museum over the denial of access for 'anti-whalers', in April 2015 the World Association of Zoos and Aquariums (WAZA) requested its member organizations to halt the purchase of Taiji dolphins. One month later, WAZA threatened to expel the Japanese Association of Zoos and Aquariums (JAZA) if they continue the practice of purchasing Taiji dolphins. Consequently, JAZA ordered its members to change their dolphin acquisition policies and refuse dolphins

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<sup>13</sup> Nikolas Sellheim, *Legislating the Blind Spot. The EU Seal Regime and the Newfoundland Seal Hunt*. Doctoral dissertation. (Rovaniemi: Lapland University Press, 2016).

<sup>14</sup> Alexander Gillespie, *Whaling Diplomacy: Defining Issues In International Environmental Law*. (Cheltenham: Edward Elgar, 2005).

from Taiji. In order to still be able to sell and acquire dolphins, the Taiji Whaling Museum withdrew from JAZA in September 2015. Enoshima Aquarium in Fujisawa and Shimonoseki Marine Science Museum Kaikyokan followed suit in April 2017. Despite having had the potential to severely impact Taiji, the WAZA ban did not affect the Taiji dolphin trade since focus shifted towards non-WAZA-members.

## Discourse

What links Canadian commercial sealers and Taiji whalers is that they are non-indigenous communities, they are marine mammal dependent, have come under close scrutiny of the international community, and are subject to legislation and decisions that they have not had an opportunity to negotiate. Wearne laments that discourse-shaping documentaries such as *The Cove* “ignores tradition, heritage and ancestral histories traced back through Japanese and European history.”<sup>15</sup> I would argue that the same applies to the legal and political discourse surrounding marine mammal hunting by sidelining the interests of the non-indigenous local population whose hunting/killing

practices are subject to international criticism.

This is best reflected in discussions for a STCW quota under the IWC which are quickly silenced while repeated calls for the sustainable use of whales – and thus a lifting of the moratorium – do not find majority support. Although the Japanese Small-Type Coastal Whaling Association is present at IWC meetings, an open discussion between whaling proponents and opponents does not take place. The socio-economic relevance of whaling is therefore merely raised in indigenous whaling contexts. Given the economic significance of the sale of dolphins for Taiji, the WAZA decision could have been an avenue for dialogue and discussion on animal welfare, human rights and ethics surrounding animals in captivity. Merely the prefectural government of Wakayama Prefecture raised these points in an open statement.<sup>16</sup> Recently released Japanese documentaries, such as *Behind the Cove* (2015) or *A Whale of A Tale* (2016) similarly aim to paint a nuanced picture of the whale and dolphin drive in Taiji. Legally, however, Taiji fishermen have little weight to argue their case on an international level given that they do not have a strong international lobby. On

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<sup>15</sup> Simon Wearne, “Tourism Development and Whaling—Heritage as Sustainable Future” *Tourism Planning & Development* (July 2017) 92.

<sup>16</sup> “Wakayama Prefecture's position on the World Association of Zoos and Aquariums' (WAZA) announcement to suspend the membership of the Japanese Association of Zoos and Aquariums (JAZA) due to the Dolphin Drive Fishing in Taiji,” *Wakayama Prefecture*. URL: <http://www.pref.wakayama.lg.jp/prefg/071500/iruka/documents/gazaenglidhtsuiki.pdf> (accessed 4 December 2017).

site, environmental groups demonstrating in Taiji are kept at bay by a seasonally manned police station directly next to the killing site. On the international stage, the Japanese government also defends the hunt for small cetaceans, for example at the IWC. Taiji itself, however, does not have the ability to invoke its rights.

As regards the seal hunt and in light of the absence of a regulatory body of global sealing, sealing communities and bodies – both indigenous and non-indigenous – have unsuccessfully attempted to overturn the EU trade ban through the European Court of Justice.<sup>17</sup> Even though the sealing industry has two representative bodies, in light of lack of resources these are little present on the international stage and act primarily within Canada. However, also in the sealing context, both in Canada and abroad several documentaries were recently released – *Ishavsblood – De siste selfangerne* (2016), *Angry Inuk* (2017) or *The Politics of Food – Canada's Controversial Seal Hunt* (2017) – which also aim to paint a balanced picture on the hunt by inserting the notion of culture, livelihood and socio-economic relevance.

### A Few Final Words

This note has shown that there is rather little, if any, recognition of marine

mammal-hunting local communities in international legal regimes that affect them. Non-indigenous whale and seal hunters do not have a lobby strong enough to influence the international discourse on marine mammal hunting that would foster a discussion on their livelihoods. Inevitably, even though countries are party to the CBD they do not implement community recognition, arguably because of the normative influence of international groups on policy-makers to halt marine mammal hunts.



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<sup>17</sup> Dorothee Cambou, "The impact of the ban on seal products on the rights of indigenous peoples: A European issue." *The Yearbook of Polar Law* 5 (2013).



# In a world of land and water, where does ice fit in? A report from the ICE LAW Project

*Philip Steinberg & Eris Williams-Reed\**

## Introduction

Ice complicates a world view where solid, stable land is positioned opposite liquid, mobile water. Ice melts and freezes; it breaks apart and moves; it has both land-like and water-like social properties; its edges are unclear. Ice is as challenging for international lawyers, boundary practitioners, and political theorists as it is for geoscientists and global environmental policymakers. The Project on Indeterminate and Changing Environments: Law, the Anthropocene, and the World (the ICE LAW Project) investigates the potential for a legal framework that acknowledges the complex geophysical environment in the world's frozen regions and explores the impact that an ice-sensitive legal system would have on topics ranging from the everyday activities of Arctic residents to the territorial foundations of the modern state. This report will outline the background of the Project, as well as its objectives and structure, activities, and future plans.

## Background

Although the United Nations Convention on the Law of the Sea (UNCLOS) (United Nations 1982) is universally recognized as providing the fundamental governing framework for the ocean that lies at the center of the Arctic region (e.g. Ilulissat Declaration 2008), only one of its 320 articles acknowledges that parts of the ocean are, for at least part of the year, not liquid. Article 234 gives coastal states exceptional environmental powers in portions of their exclusive economic zones where the persistence of “ice-cover” for “most of the year” poses a hazard to navigation. However, even this article contains lacunae that complicate effective implementation: what is meant by “ice-cover”? At what point would melting due to climate change render an area not “ice-covered” for “most of the year”? How do these provisions relate to other provisions in UNCLOS, such as those governing international straits? Can Article 234 inform legal practice in other areas where UNCLOS implementation is complicated by the presence of ice (e.g., should pack ice have an effect in determining baselines)? How does Article 234 reflect (or fail to reflect) the concerns of users other than commercial shipping interests, such as indigenous inhabitants, for whom ice is not a hazard but an enabler of livelihoods? (Aporta

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2011; Byers 2013; Kay 2004; Steinberg et al. 2015).

For all these reasons, it is apparent that UNCLOS provides, at best, a starting point for regulating activities in ice-covered maritime regions. But if UNCLOS is not fully up to the task, how might it be supplemented, or interpreted, or replaced to better reflect the activities that transpire on a frozen ocean? And, equally significantly, what does the failure of UNCLOS to adequately account for frozen ocean tell us about the underpinning principles of state sovereignty and international law, in the Arctic and elsewhere?

In 2014, these questions led researchers at IBRU, Durham University's Centre for Borders Research, to form the ICE LAW Project. The Project began with an inaugural workshop, *International Law, State Sovereignty, and the Ice-Land-Water interface*, in June 2014. An interdisciplinary group of anthropologists, legal scholars, geographers, and political theorists, with the remit extended to include not just the legal status of sea ice but, but, more broadly, the concerns and practices of peoples and institutions that encounter the specificities of polar landscapes and seascapes. One year later, we secured an International Networks Programme Grant from the Leverhulme Trust to expand the Project's connections through a series of collaborative meetings, with the

Network launching in July 2016. Between 2016 and 2019, we are hosting a variety of workshops, community meetings and conference sessions throughout the UK, Europe and the Arctic Nations.

## Project Objectives and Structure

The ICE LAW Project is guided by three objectives:

- To examine the challenges posed by polar environments to Western political, legal, and regulatory systems in order to improve understanding of historic and potential relationships between the physical nature of the geosphere, constructions of territory, and practices of territorialization.
- To assist in developing legal and regulatory mechanisms to address the obstacles and opportunities that the physical nature of the polar environment poses to actors there, from indigenous peoples seeking self-determination to corporations seeking secure investment opportunities.
- To extend findings about the practical and conceptual influence of the polar environment within Western and non-Western legal and social systems to inform understanding and policy-making in other regions of the world where the

geophysical categorizations that underpin state authority are similarly upended.

To meet these objectives, the ICE LAW Project incorporates the work of five subprojects.

The *Territory* subproject (Stuart Elden, leader) critically examines the extent to which concepts of territory are rooted in simplified assumptions of the planet's surface that were inherited from particular experiences and institutions in temperate Europe. While commonly understood as a bounded space under the control of a group of people, territory embodies a complex bundle of relations – political, geographical, economic, strategic, legal, and technical. Questions of the materiality of territory – what might be called the question of terrain – remain underexplored. These issues are further complicated when we think of non-solid elements, above and below the earth's surface, such as water, sub-soil, air, or ice and when we consider these elements' volume, and the ways in which they are dynamic over both space and time. Thus, while questions concerning ice and the planet's frozen environments are at the heart of this subproject's concerns, many of the issues raised apply to other parts of the Earth, and indeed to an adequate political-legal theory of territory more generally. Essentially the key question of this theme is: How can theories of territory

better account for the complexities of the geophysical?

The *Resources* subproject (Gavin Bridge, leader) critically explores how polar geophysical environments shape the political, economic, and cultural practices through which natural resources are acquired and assembled as commercially valuable assets. Historically, northern environments have been sites of resource economies and non-renewable resource development. Today the Arctic is again a 'frontier' for the development of new energy, mineral, and aquatic resources. While there is already substantial research on the technical challenges of working in polar environments, there has been relatively little attention to how the geophysical properties and environmental dynamics shape institutions of property and regulation, and the practices of 'economization' by which Arctic materials (fish, ores, hydrocarbons) are made into commercial resources. The Resources subproject examines how institutions and practices of resource development in frozen regions are adapted to the materialities of polar environments, deliberately suspending an initial distinction between 'commercial' and 'traditional' forms of resource making in favor of a transversal perspective focused on how resource economies incorporate, in different ways, the materialities of polar nature.

The *Migrations and Mobilities* subproject (Claudio Aporta, Aldo Chircop, Kate Coddington and Stephanie Kane, co-Leaders) explores the movement, convergence and conflict of people, animals and ships as they navigate through and overlap in geographically confined areas, or choke points. We explore the diverse interactions produced by the differing types of mobilities encountered in polar environments, from commercial navigation routes and migrant labor flows to migratory animal patterns and seasonal, subsistence movements of local populations. We seek to understand how these interactions are shaped by geophysical realities that undermine taken-for-granted land-water binaries, such as changing coastlines, shifting rivers, unstable islands, and melting, mobile ice. The subproject necessarily engages with the geopolitical constructions of boundaries, territory, and jurisdictions of the modern state and international law that have been rooted in a taken-for-granted binary between land and water. But the dynamic geophysical properties of northern environments, especially with regard to ice-covered areas and other spaces affected by global climate change, call into question some of these constructions.

The *Law* subproject (Timo Koivurova, leader) is rooted in a study of the challenges arising from the failure of international law to recognize the

distinct category of sea ice. Through an investigation of the reasons why this is so, an inquiry into how this gap in jurisprudence is being met through domestic and sub-national legislation, and speculation as to how these efforts might inform environmentally-sensitive law in other areas in the Arctic and beyond, the research carried out in this subproject will contribute to establishing a framework for legal systems that are better suited to the geophysical environment of the polar regions. In so doing, the subproject will advance broader understanding of the limits and possibilities for adapting legal and political systems to environments that challenge accepted divisions of Earth's surface into solid land (territory) and liquid water (non-territory).

The **Indigenous and Local Perspectives** subproject (Jessica Shadian and Anna Stammeler-Gossmann, co-leaders) targets specific areas of concern to coastal indigenous and local communities across the Arctic for whom the polar environment constitutes a customary space or whose livelihood may be influenced by changing physicality of the environment. The interests of coastal communities, including local hunters and gatherers, indigenous corporations, indigenous governments, and aboriginal owned commercial enterprises, often differ from the priorities of government agencies, intergovernmental international and regional organizations, or the commercial sector.

Trends associated with climate change and the subsequent pressure on and accessibility of Arctic resources prompt the need to incorporate indigenous and local knowledge, as well as gaps in community participation more generally, into interdisciplinary research agendas, including the ICE LAW Project.

## Activities

Following the launch of the Project's Leverhulme-funded Network, Jessica Shadian of the Indigenous and Local Perspectives sub-project led a community Talking Circle on Arctic search and rescue at Sand Point (Alaska, USA) in December 2016. Organized in connection with the Aleut International Association, with additional support from the US National Science Foundation, the meeting led Sand Point residents to consider gaps that currently exist in emergency preparedness and revealed an urgent need to establish direct channels of response with external authorities. Anna Stammler-Gossmann also began preparatory fieldwork for future research on fishing practices in Bugøynes (Norway).

In April 2017, the Law sub-project, led by Timo Koivurova, held their first workshop, 'Laws and Regulations Currently Guiding Human Behaviour in Icy Environments', at the University of Lapland (Rovaniemi, Finland). Following presentations by speakers from varied legal backgrounds, the

workshop concluded that the governance of sea ice and any other geophysical environments should be approached from the foundations of current legal practice.

Less than two weeks later, a joint seminar, 'Rethinking Perspectives on Arctic Issues in 2017', was held at Dalhousie University (Halifax, Canada) by the Migrations and Mobilities sub-project in association with the Master Mariners of Canada. Coordinated by Claudio Aporta, Aldo Chircop, Stephanie Kane and Leah Beveridge, the seminar initiated an important dialogue between key players, progressing improvements in safety, preparedness, and response, and engaging with Arctic communities on such topics.

In May, Gavin Bridge led the first Resources sub-project workshop, 'Anticipating Abundance: Economizing the Arctic', at Durham University (UK) with the aim of considering how the bio- and geophysical materialities of polar environments enable and disrupt an anticipatory economy. The sub-project is currently working on a specialist publication that will explore this topic from geographic, economic, anthropological and cultural perspectives.

Later that month, Stuart Elden's Territory sub-project held its first workshop, Territory in Indeterminate and Changing Environments, in

association with ACCESS-Europe at the University of Amsterdam (The Netherlands). The workshop aspired to begin thinking about how theories of territory can better account for the complexities of the geophysical. While the workshop did not provide any definitive answers, it did show the fertility of the diverse empirical work being done, and the usefulness and limits of the theoretical terms being discussed.

During the summer, the Project had a strong presence at two major international conferences. We hosted a pair of sessions at the International Congress of Arctic Social Science in Umeå (Sweden), with papers and discussion focusing on the challenges and opportunities that emerge when southern institutional, legal, and social norms are extended to the world's frozen regions. Similarly, we held a session at the Nordic Geographers Meeting in Stockholm (Sweden), which invited participants to explore the challenges that emerge when notions of territory, law, resources and mobility inherited from temperate, continental areas are applied to the Arctic. We also held our first Annual Meeting in Umeå and agreed that the Project's network is most productive when dialogue within the sub-projects is coupled with dialogue across them. We are now working to open up opportunities for focused collaboration between the different sub-projects.

In light of our discussion at the Annual Meeting, the Territory sub-project held its second workshop, Territory, Law and the Anthropocene, at Warwick University (UK) in December with input from the Law sub-project. Building on discussion from the first Territory workshop held in Amsterdam, the Warwick workshop questioned the extent to which we need to rethink our way of theorizing territory, and the legal-political regimes that govern it, in light of the results of anthropogenic climate change.

#### Future Plans

Looking ahead, 2018 and 2019 offer many opportunities for the ICE LAW Project's network to develop new relationships between different disciplines. Following a successful application to the Leverhulme Trust, we are delighted to announce that a new doctoral training center for Arctic research will launch in 2018. Led by ICE LAW's Director, Phil Steinberg, the Durham Arctic Research Centre for Training and Interdisciplinary Collaboration (DurhamARCTIC) will support doctoral candidates at Durham University conducting research projects relating to interdisciplinary understanding for a changing Arctic. More information can be found at the training center's website, <http://www.durham.ac.uk/arctic>.



We are also pleased to announce that the final ICE LAW Project conference is scheduled to be held from Thursday 25 through Saturday 27 April **2019**. We will issue an open call for papers in 2018 and would welcome presentations that resonate with any aspect of the ICE LAW Project, as well as those that aim to achieve synthesis between the Project's different themes. Further details will appear on the Project's website, <https://icelawproject.org/>.

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